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A Weekly Journal of Education.

Vol. LXXIII.

For the Week Ending August 25, 1906

No. 6

OSSIAN LANG, Editor.

The Rating of Teachers.

There can never be any satisfactory rating of teachers until there is an incontestable method for measuring teaching efficiency. Personal considerations and individual theories are too much in control in spite of undeniably serious endeavors on the part of principals, supervisors, and superintendents to arrive at something like general principles of criticism. The chief reason for this condition of affairs is lack of agreement as regards professional standards. There is too much dependence upon intuition. As a result efforts to create so-called merit lists invariably give rise to contests, more or less acrid, and the story goes that sometimes they cost the conscientious superintendent his position.

A device which has commended itself to many superintendents consists of examinations in the theory and history of education and related subjects. The principal argument in favor of it is that these examinations, when intelligently conducted, will reveal not only the intellectual grasp of a teacher, but also his devotion to the study of his profession. The argument against it is that acquaintance with the various branches of the studies of education is no evidence of his efficiency. Admitting the force of the latter argument, there still is left the probability that the theoretical test proves something, and a something that is worth much. Other things being equal, a student of the fundamentals of his profession is entitled to higher consideration than one who tries to live by the light of his small candle of personal experience.

Many teachers cease studying as soon as they believe themselves to be secure in their positions. They must be compelled in some instances—to our shame, let it be confessed—to subscribe to some professional periodical, and then they generally choose the cheapest paper, rather than the best. In fact, they are teachers who are not capable of distinguishing between the good and poor literature put out for their especial use. A paper with not an ounce of trained educational judgment behind it may succeed in building up an immense subscription listthis has been done. As long as this is possible there is little ground on which we can claim that teaching is entitled to the rank of a profession. The study of educational foundation principles certainly develops professional judgment, and so the possession of it is justly considered a valuable asset. In constructing a merit list an examination into the professional equipment of a teacher is not only justified but, under present conditions, is actually necessary.

Let us make due allowances to the argument

that a knowledge of the philosophy and history of education and related subjects is not a final proof of one teacher's superiority over the other in point of teaching efficiency. At the same time let us be no less candid in admitting that such a knowledge counts for much and ought to be given full credit.

Pensions.

The sense of security which has come to college professors in the final establishment of the Carnegie Pension Fund will be of undoubted benefit to our colleges and universities. An instance in point is that of a professor who is much in demand the country over. Recently a very flattering offer was made him, assuring him a salary much larger than his present one. Moreover, the proffered position was very much to his liking. The argument which finally persuaded him to keep his professorship was that in ten years he would be entitled to a pension from the Carnegie Fund and that after his death his wife would be comfortably taken care of if she should survive.

By a generous interpretation of the principle of the Fund the committee having the matter in hand has decided to award a pension of \$3,000 a year for life to Dr. William T. Harris, the retiring United States Commissioner of Education, and if Mrs. Harris should survive him she is to receive one-half that sum annually.



The workings of the Carnegie Fund ought to prove a powerful argument in favor of the pensioning of school teachers generally. This is not a matter to be left to local initiative. It is doubtful whether it should be made a State affair. My personal opinion is that we ought to have a national system of pensions. Does the plea which permits pensions to be paid to war veterans not apply with much greater force to the true preservers of the nation, which are the teachers thereof? Let us keep up the discussion. The School Journal invites the use of its columns for contributions toward the solution of the problem.



The salaries of all teachers in the elementary grades of the Cleveland public schools are to be raised the coming year. The total increase will be about \$100,000. The average increase for each teacher is about \$60. The advance under the new schedule will be exclusive of the usual increases under the old salary schedule.

An Englishwoman's View of Our Schools.

Miss Kate V. Stevens, principal of a girls' school in London, England, is visiting various sections of this country to make a study of our schools. She has been principal for ten years, and has taught in the school for twenty years. The Denver Post reports an interview with Miss Stevens, in which she says:

"In England we have centuries of tradition to overcome when we desire to introduce a new method. "In Eastern America the tradition, while not

strong as it is in England, is strong enough to make people too conservative.

"In the West you have no traditions and you can have the best of the old methods and combine them with the newest methods, and can try all kinds of

experiments.
"You have as many systems of education as you have states, and there is no general method in this The West is the best place to study your country.

methods, and it more than pays an investigator to take the long trip out here.

"The school in which I have been for the past twenty-one years has changed its character entirely since I was employed in it. It was the ordinary pay school for girls at first, but has been used in educational experiments since that time. At present it is a school where the practical sciences are taught, such as housewifery, nursing, and the like. We have only the graduates of the other schools there, and mainly those who are preparing themselves for teaching. It is not a normal school, and you have nothing of the same order here in America.

I find that our English schools are ahead of the American in the manual training lines. We have always had manual training in our system of education, but it is only in its infancy here. More time should be devoted to it, as it is very necessary that the youth of the land know how to work with their

hands as well as their brains.

I think the plan of Alfred Mosely, who is bringing different parties of English teachers to this country so they can study your methods of teaching, is one of the best things that could have happened. The travel here will broaden the teachers as nothing else would, and make them ready to give new methods a trial."

Ten Primary Teachers and Italy.

A picturesque little fishing village on the Adriatic sea, Sinigaglia by name, seems likely to make a name for itself in history, according to a recent editorial in the New York Sun:

editorial in the New York Sun:

Hitherto it has been chiefly celebrated as the birthplace of Pope Pius IX, and for memories of the old Roman days. Hard by is the Metaurus River, where Hasdrubal was undone, and Pompey burned down the town in the civil war. The town has its share, too, of medieval art and romantic renaissance traditions, but it has created very little stir in the twenty-four centuries since the Gauls founded and named it.

The women of Sinigaglia have now changed all this. Ten primary school teachers of Sinigaglia, according to the Rome correspondent of the Tablet, having advanced ideas about their rights, went before the Board of Registry and demanded that their names be put on the voting lists. Male Sinigaglia thought this a great joke, till the board complied with the demand. The District Attorney carried the case to the provincial Court of Appeal at Ancona, and that body has just confirmed the legality of the registration. The case will undoubtedly be carried to the highest tribunal, the Court of Cassation, but lawyers believe that the decision will stand.

In that case the ten Sinigaglia school-ma'ams, by merely insisting on their legal rights, will have gained the suffrage for women thruout Italy, without any parliamentary action. It would be as astonishing an example of judicial legislation as history can show, for however open to the new interpretation the Italian Constitution may be, there is no doubt that its framers had no idea of making women voters.

At any rate, Sinigaglia becomes a war cry for woman suffrage, and the ten primary schoolma'ams enter into history as heroines.

history as heroines.

N. E. A. Notes from Secretary Shepard.

The officers of the N. E. A. deeply regretted the necessity for abandoning the San Francisco convention. The local committee, teachers, and citizens of San Francisco, with characteristic loyalty to their invitation, urged us, after the disaster, to accept the hospitalities of a model camp which they proposed to establish on the beautiful Pied-mont Hills back of Oakland and Berkeley. The executive committee, however, did not deem it wise to allow our stricken hosts to add to their overwhelming burdens; while, for many reasons, it was found impracticable, as it would have seemed discourteous, to transfer the convention to another city.

In accordance with the constitutional provisions, the present officers of the Association will necessarily continue in office until the annual meeting in 1907.

Much thought has been given to methods by which the Association may continue its work with the least interruption. At first it was thought that the papers planned, and in many cases partly prepared, for the San Francisco meeting, might be pared, and an application of the paper of the san Francisco meeting, might be pared to the published in a value of the paper. collected and published in a volume for the year. This was found to be impossible, owing, in part, to the general desire of the department presidents to reserve the most valuable papers for the next meeting, that they may be discussed in convention. It was finally decided, in view of the fact that the

Association completes its first fifty years in July, 1907, to publish a semi-centennial volume, and to

incorporate in this volume:

The Proceedings of the Department of Superintendents at

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It is gratifying to be able to announce that the bill for incorporation of the Association by act of Congress passed the Senate on June 29-having previously passed the house-essentially in the form adopted by the active members at the Asbury Park meeting (see pp. 34-36, Asbury Park volume). It was signed by President Roosevelt on June 30, and will become operative as a National Charter when formally accepted by vote of the active members at their next annual meeting. In the meantime, the original certificate of incorporation of the Association, which expired on February 24, 1906, has been temporarily extended.

The present active membership of the Association is 5,261, there having been added 1,134 during the past year. It is the purpose to make a special effort during the current year to secure the enrollment, in every state, of all prominent teachers, not already members, who will be pleased to become permanently identified with the Association and its works as it enters upon its second half century. Since we have not the advantage of the usual convention opportunities for securing active mem-bers, we must rely upon the aid of the present active members in extending the membership among their associates and acquaintances.

The Beauty of the Commonplace.

By EDWARD F. BIGELOW, Stamford, Conn.

Why is it that we go to the menagerie (to which we take the young folks, of course, for their instruction!) to see the wonderful and interesting animals from some distant country, when we have never seen or at least never studied the more wonderful and more interesting animals in our own dooryard? The members of the nearby fauna are not so large, indeed some of the most interesting are so small that they require a microscope with which to see them. But who ever went to a menagerie because the animals are big? We hardly admit that even with Jumbo, the attraction is chiefly in the size. We like to talk of the great intelligence of the beast and the wonderful adaptation of the "trunk" or proboscis. And this, too, when perhaps we have not even admired and have never learned anything about the complex structure of more wonderful proboscides of the flies, or the bees, or the probing bill of the woodcock.

Don't misunderstand me as decrying or belittling the gigantic animal, nor the interests connected with the worn-out rope at one end and the limp, writhing piece of hose pipe at the other. What I do decry is that we won't admit that we went to see mere size only. When it comes to intricate structure and wonderful adaptation of means to ends, your Jumbo is excelled by many an animal near your own doorstep.

Another much advertised feature is the gaping, cavernous mouth of the evil-smelling hippopotamus, or the rending jaws of the lion, or the vicious tiger. And yet, wonderful as these organs really are, they do not equal those of the pouched gopher, the chipmunk, the wasp, the cricket, or the grasshopper. The point I wish to make is that we are too apt to think of beauty and interest as qualities belonging to the rare and the distant, rather than to the near and the commonplace. Not long ago I asked some young folks what were their favorite birds, especially young birds. The answers included robins, Baltimore orioles, scarlet tanagers, gold-finches. Yet when I called their attention to it, they all agreed that a little chicken is the most attractive, lovable, hugable, young creature that flies. They were, indeed, surprised at themselves, because they had not thought of the chicken as a bird. It was so near at hand, so familiar, and indeed by some so much loved that they had even forgotten, and could with difficulty realize; that a chicken is a bird. They had become accustomed, probably as the fault of some adults, to think of the chicken as too commonplace, too utilitarian to be entitled to any attention as a bird. But your

true fancier, true lover of the back-yard fowls, never forgets the fact. Over his favorite he exclaims to you, "Isn't that a beautiful bird?"

Again, I inquired of the young folks, "What is the most decorative and attractive member of the vegetable kingdom?" Preferences included vio lets, daisies, lilies, forget-me-nots, roses, and car-nations. Then to change the current of thought, I put the question in this form: "The most beautiful must be the one that the owner of a handsome estate; or that a lover of country walks or country drives would be least willing to dispense with Then the answers (some not carefully considered, and eliciting laughter) ranged thru geraniums, century plants, ivy, apple trees, maples, elms. Yet when I questioned them, each admitted that it would be possible to have outdoor beauty without the one that he had chosen. There could be a beautiful estate without a geranium, or a century

plant. Any special kind or even all that had been mentioned might be omitted.

Think for a moment, you grown up lover of nature and of suburban life,—what is the most decorative, most indispensably decorative plant?

Isn't it the grass? The young folks were pleas-

ingly surprised at the suggestion, and wondered why they hadn't thought of it, for they unanimously agreed that the grass is beautiful, not only when in flower, but in leaf. Yet why wasn't it the first to come into their minds, and into yours also, when questioned about the most decorative plant?

Ruskin has written a magnificent eulogy of grass. Here is a quotation from what he says:
"The Greeks delighted in grass for its usefulness;

the medieval, as also we moderns, for its color and beauty. But both dwell on it as the *first* element of the lovely landscape. . . . Gather a single blade of grass, and examine for a minute, quietly, its narrow sword-shaped strip of fluted green. Nothing, as it seems there, of notable goodness or beauty. . . . And yet think of it well, and judge whether of all the gorgeous flowers that beam in summer air, and of all strong and goodly trees, pleasant to the eyes and good, for food,—stately palm and pine, strong ash and oak, scented citron, burdened vine,—there be any by man so deeply loved, by God so highly graced, as that narrow point of fluted green."

(Read the whole of his loving eulogy of grass. "Modern Painters," Volume III. Part IV, chapter XIV. sections 51 and 52.) a single blade of grass, and examine for a minute,

XIV, sections 51 and 52.)

A Saturday Night Thought.

Multitudes of men and women about us have outlived their hopes. One such wrote to an old college classmate thus: "All my earlier visions of success have vanished, but I go forward with as much patience, courage, and fidelity as I can muster day by day." That epitomizes the working philosophy of many a man whose dreams of success and fame long ago faded away. And yet one finds such men at their desks and counters, still doing faithfully the day's tasks, supporting their families, keeping themselves unspotted from the world, lending a hand from time to time. Nevertheless, they belong to the great company of the disappointed. Their friends know it and they themselves are only too painfully aware of the fact thru all their working moments. One cannot help admiring these clean, useful, able, but disappointed men, who nevertheless have not given up the fight and who will stick it out to the end. And what can one say to hearten them? That their condition is parallel in that of at least two out of three of their fellowmen? That does not make the loss of hopes any easier to bear. That success and fame are not worth striving for? But they are. Rather let us say that there is something far better than the exact fulfilment of boyhood hopes and expectations—even brave acceptance of one's self and one's lot, resolute acquiescence in the will of God for one. You may lose your hopes, but save your life. You may realize your hopes, but lose your life. And there is such a thing as the rebirth of hope. After years of disappointment and disillusionment there may come to the pure and docile soul fresh visions of life's real value, some insight into the meaning of loss and pain, some foretaste of better things in store on earth and in heaven. More subdued, less exuberant, are these later hopes that spring up in the breast than the eager expectations of one's younger manhood. But they carry with them infinite suggestions and their fulfilment rests upon the sure purpose of Almighty

First Sailed Around Britain.

By Hubert M. Skinner.

Who was the real founder of the British navy? Since the fleets of Britain far surpass those of any other nation, and are the main support of her vast empire, it is interesting to go back in history to the founder of the British naval power, and to note the circumstances of its beginning.

Of course, the boy or girl who has read the children's histories of England will say that this Founder was Alfred the Great, who lived a trifle more than a thousand years ago. The veneration in which that most worthy monarch is held has led people to ascribe him the origination of the British navy, of Oxford University, of English literature and of much beside. But the sea power of the great island began several centuries before the time of the king who permitted the cakes to burn. A less worthy man, doubtless, yet a most remarkable man it was, who must be credited with the inception of Britain's naval career. Carausius was his name, and he lived in the time of the Emperor Maximiam—that is to say, two and a half centuries after the birth of Christ. Those who have taken the Christian era as the point of division between ancient and modern history must therefore class these men among the moderns, though under the commonly received divisions they belong to the ancients.

The ancient Britons, strange to say, were not seagoers. Though they had traded with the Phoenicians before even Rome was founded, they had made no use of their opportunity to copy the Phoenician ships or to learn navigation. The boat of the ancient Briton was but a "coracle," a large basket covered with the skin of an ox or of a horse. In this the Briton squatted and fished, drawing himself forward through the water by means of a board paddle, which he pulled toward him. Britain made her defense against the Romans by fierce warfare on the land. She took great pride in her grand array of war chariots, her marvelously trained war horses, and her brave soldiers with their swords and spears of bronze. As for the ocean, she did not dream of utilizing it for scenes of warfare, or even for routes of transportation. The legendary tales of very ancient conquests of portions of the mainland of Europe by the Britons are doubtless mythical.

About half a century after the birth of Christ the Romans began in earnest to effect the subjugation of Britain, which had been the dream of Julius Caesar nearly a century earlier. At the every height of the Roman power and splendor the island became a very important part of the empire. For a time, indeed, it seemed to be the center of power; for in the year 119 the emperor Hadrian went to reside there and orders governing his vast dominions were issued from his insular home. Strangely enough, it was not London that thus became, in effect, the capital of the world, but the old city of York, far to the north. In that quaint old city to-day there are many things to remind one of the proud era when it was the center of command for the Roman empire. Again, in 208, the Emperor Severus made York an imperial center; for thither he went with his two sons, Gaeta and Caracalla, and with a vast army for the suppression of disorder.

Hadrian and Severus both built walls across the island, in order to defend their borders from the fierce tribes of the north. Hadrian's wall was made of earth and timbers, and extended from the Tyne river to the Eden. The wall of Severus was constructed of stone and ran from the Tyne to the Solway, about sixty-eight miles. It was 12 feet high and 8 feet thick. This was, of course,

the work of years. But Severus lost 50,000 men in his war against the people of the north, and he felt that such a rampart was absolutely necessary to the security of the Roman possessions. When Severus died the imperial power was divided between his two sons as a means of preventing civil war. Soon afterwards the brothers returned to Rome. Gaeta was slain by Caracalla, who while in Britian had once conspired against their father's life. The fraticide, the would-be parricide, the monster of ambition, now reigned alone, and the empire began to decline.

About the middle of the century Carausius was born. He may have been of British blood, and, indeed, ancient legend treats of him as a native, though in fact he was born on the east side of the North Sea, if the historians are correct. His career is connected only with Britain, and to all intents and purposes he was a native. He was "a man of low birth." Among the proud families of the island he had no part. Contempt and buffetings were doubtless his portion from childhood. To the Roman commander, who cared only for bravery and ability, there was but little to cause him to love the land of Britain or its people.

Why is it that the fires of patriotism are so often found burning most brightly in the bosoms of those who have the smallest share in their country's gifts and honors? Why is it that even slaves, as Cicero remarks, are often moved to labor and suffer for the welfare and pride of their land? Strange as it may seem, a nation often profits by the efforts of those who owe it least.

Carausius learned from Rome the lesson which Rome learned from Carthage. The Britons must cultivate the sea. No longer must they hope for order at home or dream of ultimate independence unless they should have a highway upon the waters.

The defiles which led through the dense forests and the fens of Britain could not be depended upon for prompt and effective military movements. An approaching fleet must be seen by scouts upon the water long before it could be discerned from the headlands of the coast, if its forces were to be met successfully.

The naval spirit of Britain awoke in the breast of this poor, ignoble wretch, born of the scum of society. He is thought to have been about thirty-six years of age when, as he believed, an opportunity came to him. He had been much with the sailors in his military service. He had become acquainted with ships and with naval war. He had made acquaintances among those who might serve his purpose. He had given evidence of high ability and bravery. He now went to Rome to secure a command.

According to ancient British legend, which supplements the historical account we have of him, he represented there that the British coasts were menaced from without; that the British kings, or rulers, either could not or would not punish them; that if he were given a naval command he would bring directly to Rome all such invaders for such punishment as the empire might choose to inflict. Some sort of a commission was given to Carausius, and he returned to Britain. There he unfolded a daring plan, which attracted the lovers of adventure everywhere. He planned to sail entirely around the vast island—for island it was assumed to be, though no man had ever been around it.

The proposition had much of the fascination, and also much of the apprehension, of the expedition of Columbus, twelve centuries later. What might not such a voyage reveal? Was there really an end to the land in the north, or did it stretch on without limit? Journeys to the north revealed changes in the positions of the stars, strange variations in the time of day and night, differences in

the types of animals and plants, an ever increasing degree of cold. It was an unknown world into which they were to go. But Carausius held out to his followers promises of plunder and of license beyond their dreams. And still outwardly appearing loval to the Romans he gathered together adventurous men enough to make up a large company.

The company sailed gayly up the North Sea, past the familiar coasts, and into the unknown regions. They descended upon the northern shores, and ravaged them. They visited the islands and coast towns of Caledonia, plundering and destroying wherever they went. All that was worth carrying away, they took as booty. They were practically pirates. But they were inured to war, and lived in the days when might made right. And perhaps they did no more than the northern tribes had long been doing to the people of South Britain, whenever opportunity offered.

Carausius must have found the government of his crew as difficult a task as its organization in the first place. Yet he was able to maintain his authority over his wild followers. On his return to the south, when he had completed his marvelous voyage, he boldly proposed to the Britons that he should be their king, and that they should drive out from the entire island every vestige of Roman power.

The slumbering spirit of discontent arose among the Britons, and they received the base born Carausius as their sovereign.

When the Emperor Maximiam learned of this, he at once set a price on the head of the bold navigator, and planned the re-conquest of the island. But the British were able to defend themselves with spirit, and the emperor had his hands full of other matters of great moment. After a time, Carausius actually succeeded in securing from him a recognition of British independence.

For about seven years, according to veritable history this sailor king reigned in Britain. At the end of this time he was treacherously slain by his chief officer, Allectus by name, in whom he had placed the greatest confidence. Three years later, this traitor was overthrown by the Roman general Constantius, and Britain again became an important part of the empire. From the old city of York, Constantine, the son of Constantius, went forth later to become the great ruler, the builder of Constantinople, the first of the Christian emperors.

While the story of King Carausius, the earliest British naval hero, does not appear in the histories of England now in vogue, we are likely to read of him in the future; for the histories which practically omit the period of early Britain are going out of fashion, and the committee of Seven have voiced a growing demand for books which shall give to the ancient British race a share of attention commensurate with its importance as one of the principal stocks from which the British of to-day are descended.

Although we have so few of the details of the life of Carausius that we are scarcely able to judge of his aims or his motives, we may still remember him as the leader of a great naval expedition and the founder of the sea power of the British Isles.

THE SCHOOL JOURNAL

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A. S. BARNES & CO., PUBLISHMEN RLIZABETH, N. J., 16 Jefferson Avenue. NEW YORK, 11-15 E. 24th Street THE SOHOOL JOURNAL is entered as second-class matter at the Elizabeth N. J. Post-Office

Australian Education.

The educational systems thruout Australia and in New Zealand, according to a correspondent to a London daily paper, may be described as Free, Secular, and Compulsory. In only unimportant ways are there any divergences from this rule.

To the average non-Catholic Australian—one born in Australia of Australian parents, and educated and brought up there—the fierce battle that rages round the Education Bill is quite incomprehensible. He can understand a body fighting for its rights and its freedom, but the linking of religion and education is a thing foreign to his experience, and he is at a loss to find justification for the title of a Bill which, while concerned with the teaching of religion, leads one to believe that its object is to do with the instruction of youth in the every-day sciences.

In the early days the religious bodies in Australia were the first to build schools and provide teachers. But there was a large proportion of the Colonists who objected to denominationalism-chiefly those whose religion received no subsidy from the Stateand, consequently, a non-sectarian system arose which has now practically monopolized the field of education.

The experience of each of the States has run along fairly parallel lines, and the case of the Foundation State—New South Wales—may be taken as typical. There were four State-aided denominations—the Church of England, Roman Catholic, Presbyterian, and Wesleyan—and these had schools supported by the public funds and administered by the heads of the respective religious bodies. In addition to these were National schools, also supported by the State, but administered by a board appointed by the Government. It was found that the dual system resulted in much overlapping, and, after considerable agitation, all the subsidies were with-drawn, and Sir Henry Parkes, in 1880, established the present system of free, compulsory, and secular education.

Victoria, in 1872, adopted the free, secular, and compulsory system. The teaching of religion is strictly prohibited during school hours, and at no time must a State teacher give religious instruction. In Queensland, State education became secular and free in 1875, and in 1878 in South Australia, where religious instruction is allowed out of school hours. Under the Elementary Education Act of 1871 in Western Australia primary education is imparted in State schools, and in 1893 an Amendment Act afforded facilities for special religious teaching, half an hour per day being alloted to clergymen for the instruction of children of the same denomination. Tasmania and New Zealand possess similar sys-

Secondary education in Australia and New Zealand is largely provided by private schools and colleges, many of these being of a high-class standard. In New South Wales there are, in round numbers, 900 private schools, of which about 360 are Roman Catholic, 70 connected with other denominations, and the remainder undenominational. Of the scholars enrolled, 70 per cent. attend Roman Catholic schools.

It is the same with the universities. The University of Sydney has three denominational colleges, but quite the major portion of the students are nonresidents, and pursue their courses without any religious instruction whatever. Melbourne University has three denominational affiliated colleges. Adelaide and Hobart have as yet no college, and the students of the New Zealand University-an examining body merely-keep their terms at three undenominational colleges.

Methods in Teaching Current Events

By G. F. MORGAN, Mountain View, Calif.

Current events are history in the process of formation. Since the well-educated man should be as familiar with the history of the present generation as of the past, it follows that a study of current events is both desirable and necessary as a feature of the school's curriculum.

This fact was realized very forcibly by the writer not long ago, when he was asked by a man of some education, whether the Merrimac which Hobson sank was the same as that which battled with the Monitor in 1862! This man's life-time had extended over both those events, yet he was disposed to argue that the two vessels were identical.

The most surprising ignorance is often found even among High School pupils concerning the events of the Spanish-American war, showing that the various campaigns and battles were never laid clearly before them at the time they occurred, while the pupils themselves were attending the grammar schools. Those whose memories stretch back to the sixties are proud to tell of the time when they saw Lee march south after Gettsyburg, or to relate the circumstances under which they heard of the surrender of Appomattox.

An Englishman once told the writer that it was always a source of gratification to him to have seen the troops come home after the Crimea. Such personal impressions as we receive at these moments are lasting in their effects, and are always recalled with pleasure.

These instances and examples might be multiplied, but enough has been said to show the importance of a study of current events. Our next point, therefore is to indicate some ways in which this study may be conducted.

One of the simplest methods is that of the bulletin board. This should be a plain black-board of convenient size, placed in some conspicuous position in the school building. It is well to have it in some hall where talking is allowed, so that the children may discuss items of interest among themselves.

News may be posted on the bulletin board in a variety of ways. It may be handled by a teacher, who will record each day a terse statement of any event of importance, thus:

"Haakon VII. Crowned King of Norway."

It is not wise to record more than two events at any time, and usually one is sufficient. A notice such as the above should be written clearly in letters which may be seen across the room. At one side a place may be reserved for a portrait of King Haakon, which should not be hard to find in these days of strenuous illustrated journalism. Various pictures relating to the topic posted may be used in the same

Way.

We have advocated placing the announcements in the hands of a teacher because he is better able to select the really important events of the world. It will, however, create and sustain greater interest if the pupils be made contributors to the bulletin. In order to do this, let the children clip from the papers and magazines such things as interest them, and affix them to the board with thumb-tacks or stickers. Or, if too much rubbish be collected by this method, some of the older pupils may be appointed to act as monitors, and the news be supplied by them in the same way. But whatever method is pursued, care should be taken to have quality rather than quantity, and to change the announcements every day, so that there may always be something fresh to look for. Remember, also, that different pupils have different interests, and various clippings which to you are most interesting may go all unheeded by them.

Many teachers prefer, instead of using the bulletin board, to have a discussion of current events for their opening exercises, or immediately after the noon hour. In this case it is well to note the event on the black board, and then to direct the discussion along the line of the topic recorded. For example, after the disastrous earthquake and fire in San Francisco, when the board might have read:

"Terrific Earthquake in San Francisco, followed by Disastrous Fire. Three-jourths of the City Destroyed!"

The teacher may begin by stating or reading the topic, after which the pupils should be the narrators. Discourage any accounts which are grewsome in character, and dwell upon the heroism and deeds of bravery of individuals. Let the children see that there are heroes of peace as well as of war, and that a man need not fight in battle in order to prove his bravery.

In the illustration above, we have handled one special topic, because the importance of the occasion demands it. In the absence of any specific event of this nature, it is well to encourage each child to report upon some occurrence which has interested him. Let pictures, diagrams or maps be shown when possible, as object lessons help to fix things in the mind.

A third method of dealing with current events is by rebates, which may occupy the time-honored hour on Friday afternoons. It is a mistake, however, in grammar schools, to have the debating carried on by a few chosen speakers. It is far better to divide the whole room by some equable method, and let one side debate against the other. In this way every pupil has an opportunity, and if the question be a well-chosen one, the excitement will often run high. Allow each pupil to speak as many times as he has something to say, but always close the discussion before the last word is said, as the children will then be anxious for the next opportunity to express themselves.

Be careful to make the question simple enough, and see that the whole thing moves briskly. dren like to argue, and some of them will be willing to look up facts in order to prove their arguments. For this reason it is well for the school to take one or two journals whose business it is to record events which are of more than passing interest. *Our Times*, published by A. S. Barnes & Co., is one of the best of these. This journal latter should be taken in sufficient quantities to give a copy to every two or three children, since the news in it is specially adapted for their own reading. Copies should be kept on the reading table in the rear of the room, and the pupils given free access to them after their regular work is done. Sometimes it is well for the teacher to go over the magazine first and mark with colored pencil the paragraphs which are of special value. We all enjoy reading a paragraph which has been marked by someone else, and pupils will read items thus marked which would otherwise escape their attention.

To sum up, the following points should be kept in mind in teaching current events:

- 1. Give quality rather than quantity.
 2. Let children do the reporting.
- Let children do the reporting.
 Supply variety as much as possible.
- Illustrate with pictures as much as possible.
 Do not be dismayed and discouraged to find that pupils know so little, but be thankful for the opportunity to help them to know more.

Mr. Saunders, a former teacher, told the British House of Lords Committee on Juvenile Smoking that he could detect smokers by their handwriting—that of boys who smoked being a loose, flabby kind. Hand writing, he said, was a cinematograph of the heart.

Questions on Shakespeare's Julius Cæsar.

Shakespeare's play of Julius Caeser is one of the required masterpieces for the study of English for college entrance, from the present year to 1908. The following questions on the play, a portion of them referring particularly to the third act, which presents the climax, will be found of great help in presents the characteristics of the play as a whole. impressing the characteristics of the play as a whole, and of its details, upon the minds of high and secondary school pupils. The questions are taken from an outline prepared by the Superintendent of Public Instruction of Michigan for the use of teachers in attendance upon the teachers' institutes of that state. As many of the questions may be given to pupils for further research or for discussion as time and opportunity permit; a careful consideration of each and every one will be found helpful to the teacher himself, in his own understanding of the drama.

1. What is a drama?

2. What facts can you tell in regard to Shakespeare's life?

3. Name five other plays written by this poet.4. "This is Shakespeare's most popular play. It is a favorite with old and young, with learned and unlearned, with man and woman. It is read by some who can read no other work of the poet, and is, on the whole, the best introduction to Shakespeare."—Snider.

Give all the reasons you can to confirm this state-

When was the play written?

6. Where did Shakespeare obtain his historical material?

- 7. Which are the principal characters of the play? 8. Mention some of the military conquests of Caesar.
- 9. Mention some domestic reforms and improve-

ments that he had instituted?
10. What was the Roman government at this

11. What was Caesar's position in the government?

12. What is a plot?

13. Describe the principal plot of this play. 14. Describe Caesar's triumph in the streets of

15. Who were the conspirators?

16. Whose life did they seek, and why? Quote to show the different reasons of the different men.

17. What were the chief characteristics of the

plotters at the beginning?

18. How did Cassius win Brutus to his side?

- 19. What qualities of Cassius enabled him to do so? 20. What were some of Cassius' arguments against Caesar?
- 21. In what ways had Caesar received warnings of a conspiracy?
- 22. What aroused the superstitious fear through which Caesar was warned of impending disaster?
 23. What was the effect of these warnings?
 24. Why did he finally insist upon coming to the capitol on this day?
- 25. What is the structural condition of the drama and of the plot at the close of the second act?
 - 26. Have the conspirators completed their plans? 27. What part is each assigned?
- 28. State the condition of Portia's mind and give
- 29. Why was she fearful for the safety of Brutus? 30. With what feelings of expectancy to the reader does the third act open?

31. What is the climax?

The dramas of Shakespeare are all written in five It is almost invariable that the first act is an introduction, the second is a growth of plot, leading

up to the climax in the third act. In the fourth act is recorded the fall and the retribution begins, which, in the fifth act, culminates in the catastrophe. This play proves no exception. Notice how the plan is carefully carried out and that Act III is a climax of extraordinary power.

32. Describe the opening scene of Act III. 33. What were the "Ides of March"?

34. Who had already warned him of them?35. Who was Artimidorus and what message had

he prepared for Caesar?
36. Why is what Caesar says to the Soothsayer a

37. What shows that Caesar had listened to some

of the warnings?

38. "What touches us ourself shall be last served."
Do you think that Caesar really has no fear or that he is afraid that by heeding the warnings he may be thought by some to show fear?

Plutarch says that Caesar took the paper from Artem, but in the confusion could not get a chance to read it.

39. Who was Popilius?
40. Why did his first speech strike terror to the hearts of the conspirators

41. What did he do that made them think he was going to tell Caesar?

42. Explain Cassius' sudden excitement at this point.

43. What was the office of Trebonius?
44. What was to furnish the excuse for surrounding Caesar?

45. What shows the intense excitement among the men?

 What qualities of character does Caesar show in his reply to Metellus?
47. How did the continued arrogance and refusal

48. Interpret, "Hence! wilt thou lift up Olympus?"
49. Where is Mark Antony at this time?
50. Interpret: "That we shall die, we know,
'tis but the time,

And drawing days out, that men stand up on."

51. Describe the triumph of the conspirators? Up to this time the plans of the conspirators had resulted as they wished. Everything had been carried out as they had hoped and now they are glorying in their triumph, even going so far as to wash their hands in the blood of the murdered man. At the moment of their greatest triumph and when none thinks of disaster or that further miscarriage of plans is possible, there comes a knock at the door. An ordinary event, yet the entrance of the servant marks the beginning of the reaction, the beginning of the second movement in which the spirit of Caesar must triumph. Notice carefully how the fall may be traced from that moment, though heretofore

there is no hint of it.

52. Why was Brutus willing to have Antony come to them?

53. Why did Cassius dislike to have him come? 54. In what ways does Cassius show himself the better acquainted with Antony and his motives?

55. Why nevertheless does Brutus have his way? 56. What purpose does Antony show in his speech when left alone with Caesar's body?

57. Describe the Roman forum.

Before either Brutus or Antony has spoken the great question is, How will the people regard these speeches?

58. What difference will the peoples' reception make to Cassius? to Antony and to Brutus?,

59. Why did not Shakespeare speak in the play? 60. Why was it impossible for Brutus to understand the final attitude of the people toward him? 61. Had Brutus justified the crime in his own

mind?

62. Discuss the rhetorical features of Brutus' speech. In what ways does it discolse the characteristics of the man?

63. What was the result of Brutus' speech upon

the mob?

64. Discuss Antony's speech showing:
(a) What his task was.

(b) How he appealed to the mob spirit. (c) What qualities enabled him to feel

with the people.

(d) The effect of his delicate but apparently unconscious irony. Mark how Antony makes the word honor

reflect upon Brutus. 65. What public benefits to Rome did Antony

mention? 66. What was the Lupercal?

66a. Explain:
"O judgment, thou art fled to bruish beasts,

67. How does Shakespeare show the development of the mob spirit in the conversations of the Citizens as Antony pauses?

In the speeches of Brutus and Antony the moral man is trying to uphold the unpardonable crime; the man of loose morality to punish its perpetrators.

Mark how Antony works upon the feelings of the mob by the production of the will, and how his refusal to read it at first holds interest, increases it, and intensifies the feeling.
68. Give meaning of: commons, napkins, issue,

o'ershot

69. If the reading of the will would inflame the audience as Antony's words did; why then did he refuse to read it?

Mark the effect of Antony's coming nearer the people and lifting up the garment of Caesar.

Caesar was the greatest military hero of Rome, and his victory over the Nervii one of the most important exploits.

A very telling stroke on the part of Antony.

70. Are the adjectives used by Antony to describe

the traitors descriptive of their characters?
71. Most unkindest—What form of the adjective? Used commonly in Shakespeare's time.

72. Mark the turn from Caesar's vesture to the

body and its effect.

Again note the feelings aroused by the words of the citizens. Then the quiet voice of Antony. See how his contradictions in the lines beginning "They're wise and honorable, and will no doubt etc.," further incense the mob.

73. Why does not Antony answer the charge of

ambition?

74. Snider says, "Caesar's ambition was Caesar's greatness.

Discuss:

Note the climax of feeling and tone.

"But were I Brutus

And Brutus Antony, there were an

Would ruffle up your spirits, and put a tongue

In every wound of Caesar, that should move

The stones of Rome to rise and mutiny.

75. What was the substance of Caesar's will as related to the citizens?

Note the quiet satisfaction of Antony The two scenes with Antony in which the servant speaks regarding Octavius hinges this act

76. In the last scene who was Cinna? Who was he supposed to be?

Note how the mob grasps at anything or any person suggestive of the conspriators.

Cinna was killed for his bad verses, because his name was the same as that of Cinna the conspirator.

The play then advances some nineteen months to the formation of the Triumvirate and its final triumph afterwards over Brutus and Cassius on the fields of Philippi.

It is the character of Caesar's spirit triumphing. If no other part of the last two acts is studied it would be well to include the quarrel scene (Scene III, Act IV) between Brutus and Cassius. It is the final clash of these opposites and brings out more and more the inconsistency of Brutus and the political acumen of Cassius.

77. Which is the greatest character in this play?

Sustain your view.

78. Had Caesar reached the limit of his power? 79. Why would not the people see him crowned?

80. Is Caesar living more powerful than Caesar dead?

81. Quote to show something of Caesar as an individual.

82. Compare the historical and the Shakespearian Caesar.

83. What are some of his most prominent and powerful political characteristics?

84. Name some of the actors who have most suc-

cessfully played Caesar. Antony. Brutus.

85. What do you think of the character of Brutus?

86. What can you say of its moral beauty?

87. Was Brutus a politician? Why?

88. Why is the word honor used so often in describing Brutus and in speaking of him?

89. Why do you think he was an honorable man?

90. Did you ever know a man who had high morals standards, yet sometimes did wrong?

91. Why could Cassius overpower Brutus in

argument?

92. Why, nevertheless does Brutus usually overrule Cassius in the means of accomplishment?

93. For what does Cassius stand?

94. Quote to show in what ways Caesar recognizes the power of Cassius?

95. Did Cassius have any secret wrongs against Caesar to redress? If so, what were they?

96. Have we any statesmen like Cassius at the present time? Discuss.

97. Is Cassius' character exemplary aside from his politics? Why?

98. What do you think are the characteristics of Antony? What induces this decision?

99. How many of the characters commit suicide? Name them.

100. By what philosophy do they justify this course?

101. What is symbolism?

Distinguish between symbolism and allegory.

102. What is the symbolism of this play? 103. Attention should be called to the irony in the

play. Shakespeare's writings are rich in figurative language and this is no exception:

(a) Seek out some quotations where the speaker intended to be ironical.

(b) Show by quotations that Brutus was sometimes unconsciously ironical.

May every soul that touches thine, Be it the slightest contact, get therefrom some good, Some little grace, one kindly thought, One aspiration yet unfelt; one bit of courage

For the darkening sky, one gleam of faith To brave the thickening ills of life,

Oneglimpseof brighter sky beyond the gathering mists. To make this life worth while,

And heaven a surer heritage.—Selected,

Seven Secrets of Success With English Classes. II.

By FLORENCE ELLIS SHELBY, Indian Territory.

The School Journal for February 10, 1906, contained the first of seven articles on this subject. The seven "Secrets" as there outlined were:

I. Let the pupil correct his own productions.
II. Suggestions on assigning topics and stimulating individual effort.

III. Correlation.
IV. Teach him it is "English."
V. Some more reasons for untiring criticism of all written work.

VI. Use of reference book. "Copying" and how to vII. Coming in touch with your class.

The present discussion deals with the second suggestion.

Suggestions on Assigning Topics and Stipulating Individual Effort and Research.

(a) Primarily be interested yourself. Would you let the recitations drift just as they do now-a-days, if your own little son were in the class? Suppose he was that dull, inattentive pupil who isn't beginning to grasp the work, wouldn't you work with him in private sometimes (and that sweetly, without a word of scolding)? And wouldn't you even expend a few of your hard earned dollars for educational papers and books in search of new methods and ingenious devices to help draw him out?

This ability to be *sincerely* interested one's self is, in short, the technique of teaching English (or any other language). It comes naturally and unconsciously to the "born teacher," and seems to be naturally and unconsciously lacking in others. Doubtless you yourself have pitiful recollections of that teacher who sat at her desk in monumental submission "to duty," while one after another around the weary length of the class, were read the compositions for the day.

Anyone, even you, can develop and cultivate an interest, tho he start out with next to none. And then the grand secret of obtaining a satisfactory effort from each individual pupil is out. You must honestly care and not only care, but honestly enjoy directing and stimulating the development of

Not infrequently a teacher finds language, grammar, and compositions tedious and worrisome, because she herself is actually ignorant and uninformed on the subject. Did you ever have opportunity to look over a set of grammar papers handed in at the County Teachers' Examinations? Well, it is true that many who are trying to teach it, need to buckle down and study; to say nothing of those who scarce see the cover of a teacher's magazine or modern pedagogical work. If you are not well up on a subject yourself, it goes without saying that

you will dread the ordeal of explaining it to others.

Again, there is such a being as the "lazy teacher."

If it is "too much trouble" to correct exercises and manuscripts, and "unnecessary" to prepare the lesson yourself, with bright varied exercises before the recitation, and "tiresome" to read educational literature, then you are your own fate, and alas,

that of the class also. Pray for vim.

Thirdly, it may be the teacher has gradually demoralized both her own interest and the enthusiasm of her class, by procrastinating. If to-day's exercises are not corrected to-day, to-morrow's won't be corrected to-morrow, and what about the next day's? You know how a great stack of back work (especially ungraded papers), has power to benumb the most industrious and talented teacher. And most likely you learned during your own school days the drudgery of preparing written work, which you realized might never be criticised or returned.

(b) Cover a wide range of themes.

Don't be dogged by your outlines or text-books; and by that I mean be superior to them; make them your servants. Sad to say, some teachers are themselves slaves to these "helps."

It may be that your class needs something just a little different than that suggested by superintendent or author, even to attain the same end. And it may be too that you are quite clever enough to decide and select it yourself. Never under-rate your own originality and ability. Never over-

estimate them.

A wide range of themes does not refer simply to essay subjects, for often a grammar student is actually waked up if you tell him to diagram the sentence that last fell from his own lips. I think it has never once occurred to some pupils that the "sentences" and "exercises" in the text book are the self-same language they are using daily. Convince them that learning grammar and rhetoric, day by day, by trying over and over, is no harder than for the baby to learn to talk word by word, a little at a time. Let them analyze, diagram, correct,

Neither is it necessary to take extraordinary topics in order to secure variety. The most ordinary things often make most fruitful lessons. For instance, "Windows" (as you chance to glance at them), is something the child is familiar with; and when you assign it, his first thought is "that's easy." And you may secretly rejoice should the unruly boy say as much aloud. By all means call upon him to recite it next day. Draw him out to make suggestions. Give him a bit of outside reading on famous stained windows. In short, make him

proud of himself and you have won the day.

Bear in mind that there is always much to gain in writing on a topic that "comes easy to you"; and again, equal gain in some subject entirely new and strange. The familiar subject leaves all your attention concentrated upon the structure; the other gives opportunity to develop confidence in

the use of reference books, etc.

(c) Dry subjects. If you should see fit to give out a theme somewhat beyond the class, or should, perhaps, be called

upon to do so by the superintendent's outline, be tactful.

Lead them up to see good reasons for it, and get their mental approval before naming the appalling subject. Be enthusiastic and cheery in suggesting outlines for it, and just as patient and helpful as possible about suggesting and providing reference books and parallel reading.

A student is vastly more of a mind to put forth an effort another time, when a "dry" subject is proposed, if he can produce a creditable paper this time, tho it be with lots of assistance from you or

others

(d) Use common sense.

Follow a difficult lesson after it is at least fairly mastered, with a lively or imaginative one. For once give each one the sort of a topic he is best at. If one boy can produce lucid elegant analysis, but invariably ranks low in English, assign him several problems as his compositon, or let him write a little exposition of fractions or interest. Surely good analysis is good English.

(e) As a general working rule, assign only topics within the thought-experience of the student.

But ever and ever lead him from the known to the unknown. Somehow the word "broad-minded" is a big word. You are invariably prejudiced in favor of a stranger who is said to be broad-minded. And on the other hand, what a character you summon up to fit the word "narrow-minded." Which are you? You must measure their present thought-radius, then put yourself to it. Half life's ills (gossip, laziness, envy, arguing,

fault-finding, etc., would vanish if men were thinkers.

Train them to it.

(1) Cultivate an acquaintance with each one's mental scope. It takes time, but it saves time. (2) Let the mother-spirit guide you. That is the

gift that makes women natural teachers.

(3) Bear in mind that your real aim is to make them speak and write good English in daily life. If his graduating grammar grade is 99 per cent. plus, and he still speaks incorrectly; if her rhetoric stand-

ing is 100 per cent., and she still writes careless, incorrect letters, what is gained? And what is lost?

(f) Treasure the child's individuality.

Seek for it, cultivate it, guard it. Therein lies all his talent. Every one has some natural bent of thought; he will be at his best in expressing that.

Help him.

Then too, you must strengthen his weak points by

arousing his pride in his strong points.

Encourage him to write out just what he thinks. Perchance his natural way is superior to his more labored efforts.

Essay Outlines.

INTRODUCTION.—Man's knowledge infinitesimal compared with the unknown-the savage's knowledge most limited—only by slow stages does man pierce the veil of ignorance enshrouding him-revelation but a slow and intermittent process—it is the divine inspiration of genius that gives light to the world-mankind progresses in proportion to the number and versatility of its men of genius—unfortunately, very few in comparison with the rest of humanity.

Body.—(1) The democratic idea of equality not borne out by equality in mental endowments-for genius is defined as exceptional natural talent or extraordinary ability and powers of intellect there are many men and women of ability but few

(2) Genius manifests itself in various formsit furnishes us with the best of our literature, music, paintings, sculpture, our noblest works of art, our knowledge of the various branches of science—and it indicates how to apply that knowledge to practical purposes—thus genius may approach either perfection in design, invention, or other creative work, or perfection in execution and practice.

(3) It is through the brains of genius that the Creator appears to reveal knowledge to mankindit is His mode of rewarding man's efforts to extend His sphere of thought and action—all pioneers in the world of knowledge seem inspired from heaven

to do their work.

(4) Military genius perhaps most in the world's eye, meets with most admiration—but genius in the arts of peace more permanent and worthy of

(5) Useful to remember that brilliant intellectual gifts usually accompanied and perfected by perseverance and unflagging industry-genius and industry, then, are inseparable.

(6) Examine and analyse the characteristic genius of certain world-famed thinkers, e. g., Homer, Shakespeare, Racine, Newton, Goethe, etc.

CONCLUSION.—How deeply are we indebted to the geniuses of the past—men of genius have done most to make life what it is, full of intellectual and esthetic enjoyments that in degree and permanence

far surpass mere pleasures of sense—civilization then, is largely the fruit of genius—our book knowledge, our industries, and our more refined forms of pleasure all bear eloquent testimony to the practical genius of man-yet still unknown worlds of knowledge remain unexplored and unconquered-somewhat painful to reflect that no sooner has a race penetrated far into the unknown than it is swept into oblivion and the upward struggle recommences.

Heroism

Introduction.—Every race, savage or civilized, has its heroes and heroines-men and women who have risked and, perhaps, sacrificed their lives to benefit others—poets of old have sung of the great deeds of heroes real or mythical—Hercules, Achilles, Æneas, Ulysses-minstrels and bards used to sing of the knights of chivalry—so, too, even the poets of our day—all people admire the qualities of the hero-hero-worship is and always will be universal among mankind.

BODY.—(1) Heroism takes different forms, and is prompted by a number of motives and personal qualities-sympathy, indomitable courage, self-

(2) The nation possessing these in the highest degree dominates the world—the pages of history, rich with the spoils of time, record the triumphs of

heroic races.

(3) Customary to apply the term to one specific act-e. g., that of Grace Darling, or the behaviour of troops at wreck of the Birkenhead, or the fight at Thermopylæ-compare ancient victor's crown, modern V.C., and D.S.O. medals for soldiers and R.H.S. medals for civilians.

(4) But a life of heroism more worthy of admiration and emulation than a *single act*—compare the life of the pioneer, the missionary, or the persecuted in the cause of religion, of science and progress.

(5) The true hero is he who triumphs over the

fear of poverty, of mental or physical suffering, of calumny, of sickness, of isolation, and death.

(6) Something divine in the hero; his qualities

are God-like.

CONCLUSION.-Impossible for everyone to be a hero in the eyes of the world—few possess a combination of heroic qualities in a high degree, and few have the opportunity of displaying noble qualities before the world-but between man and his Creator there is ample opportunity for everyone to prove a hero in the strife—true heroism consists in fighting for the right—a manly fight against the difficulties of life is the best lesson heroes teach usthe honored great may appear on a pinnacle above us, but there is no shame in striving to leave our names inscribed upon the longer roll of the unhon-ored dead—heroes whose epics have never been

War.

INTRODUCTION.—Love of fighting a natural instinct in all animals—a law of creation, the strong prey upon the weak—the weakest go to the walldue to pride in one's superior strength or courage or skill—man no exception to the rule—savage races strive one against the other for the mastery—civilized races actuated by different motives leading to same result—viz., war.

Body.—(1) History of civilized races shows war to be inevitable-prompted by various motives.

(2) Religious wars: Thirty years' war in Europe; universal and persistent persecution of Jews; Spain in the Netherlands (16th century).

(3) Wars of personal ambition: Hundred years' war: Napoleonic war.

(4) Wars of conquest: Wars of Romans; war with

Scotland; Spain in America. (5) War for political independence often in opposition to (4) Scottish war of independence; Dutch against Spain; American colonies against England no one race can keep another long in subjection

without uniting with it.

(6) Civil wars: Internal political disagreement due to rival claimants to power, e. g., war of Stephen, wars of Roses; or due to misgovernment, e. g., War of Charles I., French Revolution; or due to philan-

thropy, Civil war in the U. S. A.

(7) Commercial wars: Trade rivalry, England and Spain (16th century), England and Holland (17th century), England and France (18th and early

19th centuries).

(8) Wars to maintain balance of power: War of Spanish succession, Austrian succession, Crimean War.

CONCLUSION.—(a) Few wars due to one motive only-often one motive predominates-no one of above causes referred to can be said to be inopera-

tive to-day.

(b) Man in essential characteristics much the same as 1,000 years ago-civilization has not abolished war, though removed most of its ferocity and many of its horrors-men less callous, more sympathetic and humane—work of Red Cross league—growing tendency to arbitrate—Hague Convention—but war still the final arbiter—hence appalling annual expenditure on munitions of war—preparedness for war regarded as best guarantee of peace.

Subjects for Essays or Themes.

1. Which do you prefer to read, historical or geographical books? What do you learn from each?

2. Mention some advantages we possess that our

forefathers did not.

3. Money—(1) why it is used, (2) what was formerly used? (3) Different kinds, (4) Other means of payment.

4. Exercise—(1) Its use, (2) Ways of taking it,

(3) Dangers of abuse.

5. Kindness to animals.

Name some advantages possessed by those who live in a large town.

7. Where would you like to spend the summer? Give reasons for your answer.

8. Write an account of some hero of whom you have read.

9. Good manners—(1) What is meant by good

(2) How acquired? (3) Use.

10. Dwelling Houses—(1) How would you choose one? (2) How can they be kept healthy?

11. Name some advantages possessed by those who live in the country.

12. What country would you most like to visit, and what would you expect to see?

13. Write an imaginary conversation.

13. Write an imaginary conversation between a sailor and a soldier, each one describing his duties, dangers, pleasures, etc.

14. Fresh Air—(1) Why is it necessary? (2) How

can we obtain it in houses and schools?

15. Which would you prefer, the work of a clerk, or that of a mechanic, and why?

16. Rivers—(1) Origin, (2) Course, (3) End, (4)

17. Breakfast Table—(1) What is found on it. (2) History of some articles, (3) Prices of some.
18. A Ramble—Describe a pleasant half-day

19. Libraries—(1) What they are, (2) How con-

ducted, (3) Description of one, (4) Uses.

20. Printing—(1) Caxton, (2) What did printing take the place of? (3) Results of invention.

21. A Snowstorm—(1) What is snow? (2) Appearance of country after a snow storm, (3) Advantages to vegetation, (4) Inconveniences.
22. Painters—Poets—Sculptors—(1) What they

are, (2) Works they produce.

23. Machines—(1) What is a machine? (2) Describe any common one, (3) Where they are often made, (4) Uses.

24. Weapons—(1) Defence and offence, (2) An-

cient and modern.

25. Modern inventions—Steamboats, steam-engine telegraph, telephone (one subject only).

Modern Improvements in Physics Teaching.

The Central Association of Science and Mathematics Teachers has been, in recent months, making an effort to do something towards solving the problem of more efficient instruction in elementary physics. To this end a circular was sometime ago sent out to science teachers in all parts of the coun-A series of questions was asked, to which replies were requested. Altogether 275 replies were received. A few of the facts gathered from among these answers will be of practical interest to teachers of this branch of scientific work. A question with regard to the purpose of an experiment in physics brought out the following:

One hundred and eighty believe that an experiment should illustrate an important principle of physics; 130 think it should also help to fix in mind a principle that is in practical use; and 96 think that it should in addition interest and arouse the curiosity of the student; 52 are opposed to the use of toy machines, and 41 think it an admirable idea to use

Other suggestions as to what a laboratory experiment should aim to do were sent in as follows:

It should emphasize the basis of scientific work, so that the learner realizes that he is studying things rather than statements. It should give a better undertanding of a principle and help to fix it in mind. It should tend to develop independent thinking, power to reason, self-reliance, and accuracy of expression. It should foster skill in accuracy of observation, manipulation, and methods of experimentation. It should be simple, should verify something learned in the class, should be suggestive of further experiments, and should bring in incidentally phenomena not directly the subject of the experiment. It should raise the ideals of the value of careful, accurate, painstaking work, and be related to a principle in which the student can see some use.

Perhaps these statements, when viewed collectively may be taken to mean that the laboratory is the place to impress the learner with the value, the meaning, and the methods of truly scientific work. He should learn that good results are obtained in any work only when the conclusions are based on careful, accurate, and unbiased observation, and are drawn with fearless honesty and entire fairness.

The question as to what is necessary in order to make physics more nearly fill the place it is capable of taking as an educative factor called forth a large number of replies. From them the following sum-

mary was made:

mary was made:

Physics should be closely coördinated with the daily life and experiences of the students. This should not only be done by making the practical applications prominent, by bringing the work into close contact with industrial operations, by visiting industrial plants; but should also lead us to make the problems simple, concrete, and dealing with phenomena familiar to the student, and even to found the discussions on the common experiences of the students rather than on the laboratory apparatus. In any case, the value of the principle under consideration must be evident to the student, and he must be given a clear understanding of the essential points involved. We must give less theoretical and abstract work, and a greater number of applications of the theory that is given.

In addition to coördination with industrial operations and practical application of physics, it should be correlated with the universe, by showing that the principles seem to be operative thruout our entire range of observations from the cosmos to the electron. We should dwell more on the

principles of wide application, and have less detail and fewer special cases, i. e., should teach fewer things well, and make the work less scattering. If the subject-matter is not reduced, we should have more time in which to treat it. This should be accomplished by requiring a descriptive course in advance of the present course, or by extending the work done into the grades.

We should lay far greater stress on the observation and study of phenomena as such, and pay very much less attention to the numerical relations between portions of phenomena. This means less emphasis on the mathematical and abstract side, less quantitative work in the laboratory, more demonstration work, more class work, questioning, and quizz. Some do not agree with this position; they claim that we need more accurate quantitative work, better preparation in the elementary mathematics, better apparatus, and larger equipment. Conditions would be much improved if there was a text that had less subject-matter that was inspiring and full of life and human sympathy; that was perfectly clear, that presented the subject as a consecutive or unified argument, and showed how one principle is related to others. In like manner, the manual should not make automatons of the student, and every experiment should exhibit "something doing," i. e., be active and dynamic rather than static.

In the laboratory work there should be more supervision, the experiments should follow the class work, and every experiment should have a definite and clearly stated end in view.

It is also suggested that there are too many examinations. We should lay far greater stress on the observation and

It is also suggested that there are too many examinations, that the amount of work required in physics should be commensurate with that required in other subjects, that there should be a reward for concrete knowledge for those who are destitute of ability as abstract thinkers, and that physics should be required of all students with credit varying from $\frac{1}{2}$ to $1\frac{1}{2}$ units.

Others suggest that the essential thing is better-prepared teachers, i. e., from the teaching point of view. The teachers should, in addition, have common-sense, tact, greater interest in the work, and be enthusiastic, inspiring, sympathetic, and natural. Other requirements of the teacher are that he be a trained physicist, that he have a comprehensive view of the subject, that he know more than there is in the text, that he keep informed of what is doing in the world by reading current scientific literature, and that he plan his work more carefully. He should take more personal interest in the students, should be able to gain the confidence of the pupils and arouse their interest, and should not be teaching merely because he has to do so. He must also have imagination and try to understand the pupil's point of view, and he must do all this for \$65 a month. Hence some suggest the need of better salaries for the teacher, less work for him, and a recognition of the fact that laboratory work suggest the need of better sataries for the teacher, less work for him, and a recognition of the fact that laboratory work and lecture demonstration work require vastly more preparation than ordinary class work. Others suggest that the teacher should be free to make up his own list of experiments, so that he could adapt the work to local conditions, ments, so that he could adapt the work to local conditions, and therefore he should pay no attention to college-entrance requirements, but rather should strive to meet the needs of the pupils who do not go to college. He should be required to take charge of small laboratory sections only, should make the work attractive thru variety, and have it carefully graded. He should also be a member of some science teachers' association and take active part in its work.

Finally, and by far the most important, is the question of the method of presentation. That this should be accommodated to the mental states of children of fourteen to fifteen, is suggested, and will doubtless be agreed to by all. We should always begin with physics in the service of humanity, developing the concepts used from the everyday experiences, making it less abstract and more human; we chill the student's enthusiesm of the start by conferniting him inces, making it less abstract and more human; we chill the student's enthusiasm at the start by confronting him at once by a (to him) strange set of problems and concepts couched in a strange terminology. The student craves at that age the explanations that can be given only in the light of the greatest generalizations of science; yet these explanations must be applied to his immediate activities. Hence we should cling closely to the largest principles, and let him come to comprehend gradually their meaning and scope by constant application to his own experiences and problems. We should introduce vastly more historical and biographical matter, and should show the close bearing of science on the world's progress. We should lay greater emphasis on the method of thought used in scientific work and less on the experimentation. We should give a careful presentation of each subject before any study of it is required, and give the demonstration experiments before the quantitative work is attacked. We must also cut out all college physics, get a better order of topics, coördinate the subject with the other subjects in the curriculum, and strive for with the other subjects in the curriculum, and strive for clearer expression of the ideas and concepts.

If you are losing appetite, lying awake nights, take Hood's Sarsaparilla-it's just the tonic you need.

*Teaching Pupils to do Original Work in Geometry.

By EUGENE R. SMITH.

In undertaking such a subject as this, I realize that there can be no hard and fast rules which are universal in their application. Each pupil requires somewhat different treatment, and each teacher must use methods adapted to his own personality, and to the characteristics of his pupils. It does seem, however, as if there were certain fundamentals which underlie all methods of geometrical teaching, and to open a way to a definite discussion of these is the purpose of this paper.

The methods used in original work must, of course,

depend upon, and be modified by, the reasons which make such work necessary. It seems to me that there are two principal reasons: the necessity of training the logical faculties, and the necessity of awakening and sustaining the interest of the class.

The first needs little comment; it is likely that we all would agree that without logical processes of reasoning, the race would make little progress. Whatever tends to improve the logical faculties, in however small a degree, tends just so far toward the advancement of the human race, and the widening of its horizon. Many of the subjects in our schools give little, if any, help along these lines. This statement I might find disputed by the teachers of other branches, for each teacher believes that his subject has in it something which tends toward improved reasoning. This may be so, but this much, at least, is certain: in most of the high-school This may be so, but this branches the faculty which is given the most practice, and which can therefore be expected to make the most development, is memory. This is so from the very nature of the subjects. Where, then, can a pupil learn independence of thinking, and logical processes of reasoning? Most certainly in the mathematics, and especially in the plane geometry, for here the pupil is first brought into touch with geometrical methods of reasoning, than which there is no more valuable and fascinating training for the logical powers.

As to the question of interest, all teachers must acknowledge that interest on the part of the class is a prime requisite for successful work. Geometry, taught as a collection of proofs and facts, with no element of contest, is indeed dry bones: the same subject attacked as a series of problems, more or less intricate, but always with the fascination which attends something to be conquered, is revivified, and the teacher and the class both feel the joy of strife and conquest.

The propositions themselves are some of the most interesting and instructive originals to be found. There is no fixed line between propositions and the exercises commonly known as originals, for no two books agree as to which ones are necessary as propositions. Any list of propositions is based on the opinion of some man or men as to the geometric questions most important, either in the facts proven, or in their usefulness in deriving new facts. importance, so far from taking away from the advisability of working them out as originals, adds to it, for that which one discovers is more thoroly understood than it could be if derived from some other source.

Granting, then, that a teacher intends to develop, whether in whole, or in part, plane geometry as an original study, what are the requisites for good work? I shall take them up under three heads: (1) Preparation and attitude of the teacher, (2) General training of the class, (3) Attack of specific proposi-

^{*}Part of a paper read before the Association of Teachers of Mathematics of the Middle States and Maryland.

Preparation and Attitude of the Teacher.

The most common complaint of students after having taken up some new proposition seems to be that, though understanding the proof, they can see no way of keeping it in mind, except by depending upon the memory. For example, certain construc-tion lines are drawn, and after these lines are placed in the figure, the proof follows quite easily; but why draw these particular lines? It looks like guess work, or else previous knowledge, and usually it is previous knowledge on the part of the teacher. In other words, the pupils, while understanding a certain construction or proof perfectly, do not see how anyone ever discovered it, and therefore do not see how they themselves could be expected to discover it in the first place, or to re-discover it if it happens to be forgotten. The teacher has known the proof for so long that it is almost a part of him, and he fails to see how anyone can have trouble in seeing that which is to him so self-evident. He is willing to explain the proof, but it is not explanation which the pupil needs, it is the line of thought leading up to discovery of the proof, the compelling reason for the construction lines, the method of thought process, which he needs, and which he must have before the proof becomes fully his.

There is a way to overcome this trouble; the teacher must ignore all of his previous knowledge, which depends upon the memory; he must let all his conventional proofs, and preconceived ideas go, and depend upon discovery, on fresh data. He must become an explorer, he must refuse to use a proof until he can trace the path of its discovery. Let him study each proposition, not in the light of other men's discoveries, but as an unexplored field, let him bring to bear on it all the logical power, and knowledge of preceding propositions that he may possess, let him thus discover for himself as many proofs as possible, analyzing each step with critical caution, in order that he may not be deceived into letting previous knowledge take the place of logic; then it is time enough to compare his results with other men's achievements, noting whether he has improved on their work or not, and finally settling on the best proof for class use, as determined by clearness, conciseness, and logical sequence.

Is he not then in the best possible frame of mind to guide his class through the same course? Their difficulties have been, to some extent, his; he knows why he found this proof, what compelled him to make this construction, the same reason must be made to compel the class through the same course. There will be differences in the way in which pupils follow his lead; some will scatter on ahead, and perhaps follow wrong paths,—they will need to have their mistakes pointed out, and themselves brought back to where they lost the way; others will lag behind, and will need incentive and urging to bring them up to the main body. All of these things the teacher must understand and be ready for; he must forsee the difficulties, and guard against them. He must, before and above all, keep an open mind.

If his class should disagree with him, or fail to choose the proof which he thinks best, he must remember that they, from their standpoint, may see more clearly than he the most natural sequence to a beginner; he should listen to their reasons, and then, if still convinced that his way is best, should attempt to convince the class. This should always be done by good reasons, not by arbitrary commands. There are, of course, cases where stubborn pupils might waste the time of the class in futile arguments, and this should not be allowed.

Many useful hints as to the best method of development can be obtained by careful study of the attempts and failures of the dull pupils, for from them the teacher can often find out along what lines the mind

of the pupil may be working. The bright pupils will jump from step to step in a way which is hard to follow in detail, but the slow pupil takes each step with great effort, and his path can be readily followed.

General Training of the Class.

A class should be trained to begin a new proposition by drawing a good figure, separating the statement into hypothesis and conclusion, and writing out definitely and concisely what is given, and what is to be proven as applied to that figure. Notebook work, in which assigned propositions are proven and handed in to the teacher is excellent practice, as it helps the student to acquire methodical habits of work. Then comes the crucial test, can the pupil go on, or will he stop at this point? If he has some fixed method to follow, he will be much more likely to go on successfully, and the method which I suggest is the following. The pupil should now classify the proposition as to its conclusion; for example, one class of theorems proves angles equal, another proves lines parallel, another proves triangles congruent, etc, Having done this, he should know that the proposition depends, usually quite directly, upon some other proposition of its own class, unless it can be proven by means of contraposite or converse reasoning.

Each class is founded upon some one or more definitions, and these definitions must always be borne in mind, as the proof may easily depend upon them. If the pupil then can definitely state just what previous theorems might be used to prove the proposition before him, the task becomes one which is largely elimination. Certain of the theorems may not be applicable to the question under consideration, and may be at once dropped from the list; the others, if there be more than one, must each be carefully considered in the light of the given, until at least one proof is found. The class, then, should be required to answer such questions as "How many ways do you know by which to prove four line segments proportional?" "Under what conditions are triangles equal, similar, congruent?" "Which is the broadest of these three classes?" "What ways do you know by which to prove angles equal?" "Under what conditions will two circumferences be tangent? intersect?" and many others of this type. Too many teachers might have to do some very serious thinking before answering completely such

questions. I have spoken of the possibility of proving the proposition by contraposite or converse reasoning. Of course the contraposite is far the more important of these, and I think few of us realize how thoroly it underlies the whole structure of geometry. is the method of "reductio ad absurdam?" Nothing but contraposite reasoning, and we use that method so frequently that we forget we are using it. It begins with "Two straight lines can intersect in but one point," and it is used from there to the end of the subject. Why not then discuss thoroly at the beginning of geometry the three relations, obverse, converse, and contraposite, illustrating freely by every-day examples; showing first by concrete examples, and then by the general case, that the contraposite of any true statement is also true, and then applying this to geometry to show that all geometrical truths are in pairs, contraposite to each other. True, many of the contraposite forms are valueless, for they add nothing to our previous knowledge, but the habit of looking for, and examining the contraposite forms will enable the student to discover at once many new and important theorems. The obverse and converse statements should also be examined, and here the class will readily see that the obverse and converse of a true statement are not necessarily true. This can be impressed easily

by some exceedingly ridiculous case, for example, the converse can be shown by some such absurdity as the following: "A cow has a head, therefore, because you have a head, you are a cow." The class will laugh, but it will remember. The way is then open for a discussion as to the conditions under which the converse is true, and it is very easy to show by means of contraposite reasoning, that if statements which cover all possibilities are true, their converses are true.

Another important kind of original work can be obtained by assigning a subject for investigation, rather than giving the correct results of the investigation, and asking the class to verify them. For example, on taking up angles formed by lines meeting a circumference, it is interesting to discuss first what kinds of lines can meet a circumference; second, under what different conditions these lines might intersect each other, and last, what each angle formed under the conditions might reduce to, in terms of central angles. A very comprehensive view of this part of the subject can be obtained in this way, and the knowledge will be broader than that given by any text-book, for the supplements of the angles usually considered would be investigated also, and the results would be carefully generalized. It will be found that such work aroused a great deal of interest in the class. Again, it is sometimes wise to ask a class to find out what the square on the side opposite the obtuse angle in an obtuse-angled triangle equals, rather than to tell them the formula to be obtained.

Ethics of the Laboratory.

By C. GROSSMAYER, Denver, Colorado.

A knowledge of chemistry is not the only lesson to be learned in the laboratory. I know of no other part of the high school or college course that develops in so great a degree certain valuable qualities and habits. Cleanliness, accuracy, self-reliance, and consideration for the rights of others may be called the cardinal virtues of the laboratory.

The observant student learns soon after his initiation into the mysteries of the laboratory—or perhaps only after a few failures—that much of his work has been unsuccessful because he has not kept things clean. Everything about his desk and his locker must be spotless and always in order. This, by the way, is a fine opportunity for the boy that has never had to do anything for himself.

The student next learns that absolute accuracy is the royal road to success. His notes must be carefully taken and later must be as carefully extended, with special attention to systematic arrangement. (The instructor will do well to advise his students to copy all notes intended for laboratory use with India ink, because that is not affected by acids.) Directions must be followed exactly—at least until the student has had experience sufficient to justify his making original experiments.

cient to justify his making original experiments.

No slovenly, half-way work must be offered or accepted. The student must never be satisfied to have his work "almost" right. He must be constantly reminded that for the chemist there is but one standard—absolute certainty. The expert whose services have been engaged in a case of poisoning does not testify that he "thinks" he found arsenic in the stomach. The assayer does not report to the prospective purchaser of a mine that he found "about" fifty dollars in gold and "about" twenty dollars in silver to the ton.

When the student presents some of his work, and especially when he has encountered a difficulty, he ought to be able to state clearly and exactly what he has done, and what has happened. Herein lies valuable discipline, for when the student knows

that he is expected to thus state his case, he has an additional incentive to give his entire attention to his work, and to have a reason for everything he does. He is also less likely to contract the habit of asking for help when he might have helped himself. Under a wise instructor he learns to think independently and to stand by the judgments he forms.

Great is the temptation, but greater still the victory, when a student refrains from making unreasonably frequent demands upon both teacher and fellow students for help.

and fellow students for help.

A general spirit of helpfulness adds much to the pleasure of laboratory work. It is true, too, that a student may himself gain much while helping another with his work. But it must be understood that every student's time is sacred to him. To secure him in this privilege, there are certain rules that admit of no exception. It would seem almost unnecessary to say that there is no room in the laboratory for the practical joker. The individual who thinks it funny to throw water about, to blow out the gas, to make uninvited additions to other students' work, and to indulge in childish tricks, generally needs to be quietly requested to bestow his presence elsewhere.

No loud conversation or other noise must be tolerated. No student must be permitted to disturb another who is busy. An hour's work may be lost because of a question or request coming at the wrong time and interrupting the train of thought. For this and for other reasons equally important, the borrowing of material and apparatus, and especially of note-books, is prohibited. All note-books should be at hand and ready for inspection at all times, in order that the instructor may assure himself that each student is using his own book. Students must always lock up their material and apparatus before leaving the laboratory.

Many opportunities will present themselves to impress upon the students, without "preaching," that the qualities and habits so valuable here, are the same that mark the right-minded, law-abiding citizen in the larger community in which they will soon be striving for position and honor.

Experiments in Physics.

52. Wire Moving Thru a Magnetic Field.

With long connecting wires join a coil of ten turns of wire, making a ring three inches in diameter, with the binding posts of an astatic galvanometer. Move the coil to a position in front of a strong magnet. Account for the effect upon the galvanometer. Draw the coil suddenly away from the magnet and account for the result as before.

53. Study of a Dynamo.

Connect a small dynamo with a galvanometer of five turns and cause the armature to revolve with slowly increasing speed. Account for the effect upon the galvanometer, including constancy of direction. Repeat with a uniform moderate rotation and account for the small initial effect and its gradual building up or increase.

54. Electroplating.

Attach a large clean wire nail to one terminal of a battery of three cells in series and a strip of copper [see Experiment 40] to the other terminal. Plunge both nail and copper strip into a solution of copper sulphate for a few moments and note the result. Reverse the positions of nail and strip and repeat. Which arrangement is best? Upon which terminal (anode or cathode) is metal deposited?

After the nail has been well coated, let it dry and then polish it by gentle rubbing with a dusty blackboard eraser. The copper plated nail may be nickel plated by attaching it to a suitable electrode in a solution of ammonium-nickel sulphate.

Famous Latin Hymns and Poems

Jesu Dulcis Memoria.

This is perhaps the sweetest and most evangelical hymn of the Middle Ages. It is eminently characteristic of the growing piety and "subjective loveliness" of St. Bernard.

Jesu dulcis memoria, Dans vera cordi gaudia: Sed super mel et omnia Ejus dulcis praesentia.

Nil canitur suavius, Nil auditur jucundius, Nil cogitatur dulcius, Quam Jesus Dei Filius.

Jesus, spes poenitentibus, Quam pius es petentibus, Quam bonus te quaerentibus! Sed quid invenientibus!

Jesu, dulcedo cordium! Fons veri, lumen mentium, Excedens omne gaudium, Et omne desiderium.

Nec ligua valet dicere, Nec littera exprimere: Expertus potest credere, Quid sit Jesum diligere.

Jesum quaeram in lectulo, Clauso cordis cubiculo: Privatim et in publico Quaeram amore sedulo.

Cum Maria diluculo Jesum quaeram in tumulo, Clamore cordis querulo, Mente quaeram, non oculo.

Tumbam perfundam fletibus Locum replens gemitibus: Jesu provolvar pedibus, Strictis haerens amplexibus.

Jesu, rex admirabilis, Et triumphator nobilis, Dulcedo ineffabilis, Totus desirabilis.

Mane nobiscum, Domine, Et nos illustra lumine, Pulsa mentis caligine, Mundum replens dulcedine.

Quando cor nostrum visitas, Tunc lucet ei veritas, Mundi vilescit vanitas, Et intus fervet charitas.

Amor Jesu dulcissimus Et vere suavissimus, Plus millies gratissimus, Quam dicere sufficimus. Hoc probat ejus passio, Hoc sanguinis effusio, Per quam nobis redemptio Datur, et Dei visio.

Jesum omnes agnoscite, Jesum ardenter quaerite, Amorem ejus poscite; Quaerendo inardescite.

Sic amantem diligite, Amoris vicem reddite, In hunc odorem currite, Et vota votis reddite.

Jesus, auctor clementiae, Totius spes laetitiae, Dulcoris fons et gratiae, Verae cordis deliciae.

Jesu mi bone, sentiam, Amoris tui copiam, Da mihi per praesentiam Tuam videre gloriam.

Cum digne loqui nequeam De te, tamen ne sileam: Amor facit ut audeam, Cum de te solum gaudeam.

Tua, Jesu, dilectio, Grata mentis reflectio, Replens sine fastidio, Dans famen desiderio.

Qui te gustant esuriunt; Qui bibunt, adhuc sitiunt: Desiderare nesciunt Nisi Jesum, quem diligunt.

Quem tuus amor ebriat, Novit quid Jesus sapiat: Quam felix est, quem satiat! Non est ultra quod cupiat.

Jesu, decus angelicum, In aure dulce canticum, In ore mel, mirificum, In corde nectar coelicum.

Desidero te millies, Mi Jesu; quando venies? Me laetum quando facies? Me de te quando saties?

Amor tuuas continuus Mihi languor assiduus, Mihi fructus mellifluus Est et vitae perpetuus.

Jesu summa benignitas, Mira cordis jucunditas Incomprehensa bonitas, Qua me stringat charitas. Bonum mihi diligere Jesum, nil ultra quaerere, Mihi prorsus deficere, Ut illi queam vivere.

O Jesu mi dulcissimae, Spes suspirantis animae, Te quaerunt piae lacrymae, Te clamor mentis intimae.

Quocunque loco fuero. Mecum Jesum desidero; Quam laetus, cum invenero! Quam felix, cum tenuero!

Tunc amplexus, tunc oscula, Quae vincunt mellis pocula, Tunc felix Christi copula; Sed in his parva morula.

Jam quod quaesivi, video: Quod concupivi, teneo; Amore Jesu langueo, Et toto corde ardeo.

Jesus cum sic diligitur, Hic amor non exstinguitur; Non tepescit, nec moritur; Plus crescit, et accenditur.

Hic amor ardet jugiter, Dulcescit mirabiliter, Sapit delectabiliter, Delectat et feliciter.

Hic amor missus coelitus Haeret mihi medullitus, Mentem incendit penitus, Hoc delectatur spiritus.

O beatum incendium, Et ardens desiderium! O dulce refrigerium, Amare Dei Filium!

Jesu, flos matris virginis, Amor nostrae dulcedinis, Tibi laus, honor numinis. Regnum beatitudinis.

Veni, veni, rex optime, Pater immensae gloriae, Affulge menti clarius, Jam exspectatus saepius.

Jesu, sole serenior, Et balsamo suavior, Omni dulcore dulcior, Caeteris amabilior.

Cujus gustus sic afficit Cujus odor sic reficit, In quo mens mea deficit, Solus amanti sufficit.

THE SCHOOL JOURNAL

Tu mentis delectatio, Amoris consummatio; Tu mea gloriatio, Jesu, mundi salvatio.

Mi delecte, revertere, Consors paternae dexterae; Hostem vicisti prospere, Jam coeli regno fruere.

Sequar te quoquo ieris, Mihi tolli non poteris, Cum meum cor abstuleris, Jesu laus nostri generis.

Coeli cives, occurrite, Portas vestras attollite Triumphatori dicite, Ave; Jesu, rex inclyte.

Rex virtutum, rex gloriae, Rex insignis victoriae, Jesu largitor veniae, Honor coelestis patriae.

Tu fons misericordiae, Tu verae lumen patriae; Pelle nubem tristitiae, Dans nobis lucem gloriae.

Te coeli chorus praedicat, Et tuas laudes replicat; Jesus orbem laetificat, Et nos Deo pacificat.

Jesus in pace imperat, Quae omnem sensum superat: Hanc mea mens desiderat, Et ea frui properat.

Jesus ad Patrem rediit, Coeleste regnum subiit; Cor meum a me transiit Post Jesum simul abiit.

Quem prosequamur laudibus, Votis, hymnis, et precibus: Ut nos donet coelestibus, Secum perfrui sedibus. Amen.

A German Translation.

By COUNT ZINZENDORF.

Jesu! Deiner zu gedenken, Kann dem Herezen Freude schenken:

Doch mit süssen Himmelstränken Labt uns Deine Gegenwart!

Lieblicher hat nichts gesungen, Holder ist noch nichts gesungen, Sanfter nichts in's Herz gedrungen Als mein Jesus, Gottes Sohn.

Tröstlich, wenn man reuig stehet; Herzlich, wenn man vor Dir flehet; Lieblich, wenn man zu Dir gehet; Unaussprechlich, wenn Duda! Du erquickst das Herz von innen, Lebensquell und Licht der Sinnen! Freude muss vor Dir zerrinnen; Niemand sehnt sich g'nug nach

Schweigt, ihr ungeubten Zungen! Welches Lied hat Ihn besungen? Niemand weiss, als der's errungen,

Jesu, wunderbarer König, Dem die Volker unterthanig, Alles ist vor Dir zu wenig, Du allein bist liebenswerth.

Was die Liebe Christi sei.

Wenn Du uns trittst vor's Gesichte, Wird es in dem Herzen lichte, Alles Eitle wird zunichte, Und die Liebe glühet auf.

Ach, Du hast fur üns gelitten, Wolltest all Dein Blut ausschütten Hast vom Tod uns losgestritten, Und zur Gottesschau gebracht!

König, würdig aller Kränze, Queel der Klarheit ohne Grenze, Komm der Seele näher, glänze! Komm, Du längst Erwarteter!

Dich erhöhn des Himmels Heere, Dich besingen unsre Chöre: Du bist unsre Macht und Ehre, Du hast uns mitt Gott versöhnt!

Jesus herrscht in grossem Frieden; Er bewahrt Sein Volk hienieden, Dass es, von Ihm ungeschieden, Fröhlich Ihn erwarten kann.

Himmelsbürger, kommt gezogen, Oeffnet eurer Thore Bogen, Sagt dem Sieger wohlgewogen: "Holder König, sei gegrusst!"

Jesus, Den wir jetzt mit Loben Und mit Psalmen hoch erhoben, Jesus hat aus Gnaden droben Friedenshütten uns bestellt!

English Translation.

Made by Rev. James Waddell Alexander, D.D., and first published in the Mercersburg Review for April, 1859.

VESPERS.

(Jesu dulcis memoria. Verse 1-4, Bened. ed.)
Jesu! the very thought of Thee With sweetness fills my breast; But sweeter far Thy face to see, And in Thy presence rest.

Nor voice can sing, nor heart can frame, Nor can the memory find, A sweeter sound than Thy blest

name, O Saviour of mankind! O hope of every contrite heart,
O joy of all the meek,
To those who fall, how kind Thou
art!
How good to those who seek!

But what to those who find? ah!
this
Nor tongue no pen can show:
The love of Jesus, what it is,
None but His lov'd ones know.

Jesu! our only joy be Thou,
As Thou our prize wilt be;
Jesu! be Thou our glory now,
And through eternity.

MATINS.

(Jesu, Rex admirabilis. Ver. 9
sqq.)
O Jesu! King most wonderful!
Thou Conquerer renown'd!
Thou Sweetness most ineffable!
In whom all joys are found!

When once Thou visitest the heart Then truth begins to shine; Then earthly vanities depart; Then kindles love divine.

O Jesu! Light of all below! Thou Fount of life and fire! Surpassing all the joys we know, All that we can desire:

Thee may our tongues forever bless;
Thee may we love alone;
And ever in our lives express
The image of Thine own.

LAUDS.

(Jesu, decus angelicum. Ver. 21 sqq.)
O Jesu! Thou the beauty art
Of angel worlds above;
Thy name is music to the heart,
Enchanting it with love.

Celestial sweetness unalloy'd,
Who eat Thee hunger still;
Who drink of Thee still feel a void,
Which nought but Thou can fill.

O my sweet Jesu! hear the sighs Which unto Thee I send! To Thee mine inmost spirit cries, My being's hope and end.

Stay with us, Lord, and with Thy light
Illume the soul's abyss;
Scatter the darkness of our night,
And fill the world with bliss.

O Jesu! spotless Virgin flower! Our life and joy! to Thee Be praise, beatitude and power, Through all eternity.

Notes of New Books.

In the Days of Scott, by Tudor Jenks, reawakens our enthusiasm for that great and generous spirit whose life, so vital and full-blooded in its time seems hardly to have passed a century and a quarter ago. Mr. Jenks has succeeded in presenting his subject with peculiar potency by surrounding it with an atmosphere full of richness and detail, in which the stirring events and extreme modernity which colored the period in which Scott lived, are offset by the romantic and legendary character of that immediately preceding. Mr. Jenks handles the differing colors and values of his setting with much simplicity and directness, never obscuring the central figure whose large, warm, gifted, and gallant nature seems to dominate circumstance. The struggle of Scott's personal life and the burden under which he fell, as one follows them here, remind one irresistibly of that other great Titan, Balzac, the contemporary and admirer of Scott, who like Scott, fought a losing fight against overwhelming odds, and died of his prodigious labors.

Mr. Jenks' terse presentation of the experiences of Scott's time, and his unassuming critiques of the "great magician" add much to the literature already produced on this subject. (A. S. Barnes & Co., New York.)

Several years ago, when C. C. Birchard & Company brought out The Laurel Song Book, under the editorship of Mr. William L. Tomlins, a new standard was set for public-school William L. Tomlins, a new standard was set for public-school music. Nothing like it had been known, in character of the music, especially the new music from American composers. Since then other publishers have followed suit with excellent books of songs for school use, and now the same house has brought out a remarkable book for the upper grades of the grammar schools, again edited by Mr. Tomlins, which they rightly call "a unique music book." The title is The Laurel Music Reader. It is a collection of songs for the upper grades of grammar schools, and like its predecessor, The Laurel Song Book, the music is of a beautiful quality.

The volume is rich in the compositions of contemporary American writers. These are characterized by the beauty of rhythm and melody, and by the skilful construction and delightful harmony which are the attributes of good music the world over. Important provisions are made for the adolescent voice. Folk songs have been selected from among those melodies whose sincerity and loveliness made them immortal, a number of these being new to the pupils of the public schools.

of the public schools.

of the public schools.

The predominance of songs of joy, of action, of morning, of peace, and of the ideals of modern humanism, will undoubtedly meet with the approbation of the thoughtful educator, and is sure to exercise a wholesome influence upon the pupil. Though the statement may at first seem strange, The Laurel Reader is new in its refreshing freedom from absurd and trivial conceits, as well as from pathos and sentimentality. It is a book filled with the atmosphere of religion, of a noble and spiritual patriotism, and with the joy of life and nature.

The Laurel Reader presents a number of beautiful love songs, for the editor is persuaded that the Love Theme.

THE LAUREL READER presents a number of beautiful love songs, for the editor is persuaded that the Love Theme, precious as Religion, Nature, or Fatherland as a motive in art and ethics, will always arouse a reverent attitude in youth when it is worthily treated by poet and composer. The spirit of enthusiasm and love for the best in music, and of merited praise for the songs of our own composers will, we are confident, be awakened in the grammar grades of our schools with the advent of this new book The Lauren

of our schools with the advent of this new book, The LAUREL

Miss Alys E. Bentley, supervisor of music, public schools, Washington, D. C., writes: "I have examined the advance sheets of Messrs. Birchard & Company's forthcoming music reader, and am persuaded that it will prove equally as successful as The Laurel Song Book, and will win as many loyal friends and ardent admirers. It supplies the long-wished-for desiderata of beautiful music, excellent and appropriate texts, and rich variety of theme and subject."—C. C. Birchard & Company, publishers, Boston, Mass.)

C. C. Birchard & Company, publishers, Boston, Mass.)

The study of history from first-hand sources by this time needs no defense, for it has been found vastly superior to the time-honored method of close study of a single text-book. Professor James Harvey Robinson, of Columbia University, has just published, thru the Ginns, an abridged edition of his Readings in European History. This is well adapted to advanced classes in secondary schools. In it are to be found in one volume quotations from almost innumerable contemporary authors describing important incidents and periods in the history of England and Europe. These descriptions are in no way distorted by the prejudices of a single historical student, and the reader has an opportunity to draw his own conclusions. To every thinking pupil the advantages of this method are obvious. The translations from foreign sources retain, in great part, the vividness of the original. The bibliography is complete at all times. (Ginn and Company, Boston.)

The time was when teachers and school boards thought

that nothing could be done in the way of teaching physics and chemistry in a practical manner without the aid of exand chemistry in a practical manner without the aid of expensive apparatus. Ingenious teachers who have made their own appliances with the help of boys and girls have taught us better. Very little elaborate apparatus is required for the successful study of these two branches of science. How simple and how inexpensive much of such apparatus may be is made clear in the "Manual of Home-Made Apparatus," by Dr. John F. Woodhull, professor of physical science in Teachers College, Columbia University, New York. The work is the result of Professor Woodhull's own experience in class-room work, and it is as practical a little book as has ever come from the press along its line. The old edition of the "Home-Made Apparatus," although similar and less complete than the one now offered the public met with general approbation and was widely used in all sections of the country. The publishers offer the present edition with satisfaction, feeling sure that it is destined to fill an important place in the physical and chemical laboratory. (A. S. Barnes & Company, publishers, New York. Price 65c.)

A rather original idea is the plan of "The Art Reader,"

place in the physical and chemical laboratory. (A. S. Barnes & Company, publishers, New York. Price 65c.)

A rather original idea is the plan of "The Art Reader," prepared for supplementary reading in public and private schools, by P. E. Quinn. The book is really a history of art arranged in the form of a reader, and not only is it a reader, but it is eminently readable. Beginning with some Egyptian monuments it carries the reader thence to the acropolis of Athens. The author describes the greatest of the Greek sculptors, some Greek temples, then the Roman Forum, the Laocoon and the Colosseum. An even dozen of the old masters have their stories told; and then we are transported to Kenilworth Castle, Holyrood Palace, and a group of great churches in England and on the continent. Then the reader's interest is aroused in the animal painters, famous landscapes, portraits of well-known people, the houses of parliament, Westminster Abbey, the statue of Abraham Lincoln and our own national capitol. The book is beautifully illustrated, and, in fine, it is a volume that will certainly make a place for itself in the upper grammar grades, high schools, and the private schools of the country. The author and the publishers are to be congratulated upon its excellence, in content, in illustration, and in typography. (A. W. Elson & Co., Publishers, Boston, Mass.)

Ishers are to be congratulated upon its excellence, in content, in illustration, and in typography. (A. W. Elson & Co., Publishers, Boston, Mass.)

"The Frog Book," by Mary C. Dickerson, is perhaps the most unique of nature publications. For years the toad and the frog were neglected by nature students and readers. Miss Dickerson, however, now furnishes a monumental and authoritative work on the subject. The original manuscript of this book included toads and frogs of the northeastern states only. It was amplified until it covers the whole continent. Years of painstaking effort were necessary for this book. The color plates were made from photographs from life. Some of the plates represent eight or ten negatives. They were colored from the living material by Herbert L. Guild, of Providence, who worked under the supervision of the author. There are many fine drawings in the book to indicate the food and enemies of frogs and toads. These, too, were made from photographs from life. Thus the "Frog Book" makes amends for the long neglected branch of nature study and furnishes a real authoritative work, as well as a world fascinating record. This book is uniform with "Nature's Garden" and the other volumes of "The Nature Library" to which it will subsequently be applied. (Doubleday, Page & Co., Publishers, New York.) New York.)

CE 19 Good Night's Sleep.

No MEDICINE SO BENEFICIAL TO BRAIN AND NERVES.

Lying awake nights makes it hard to keep awake and do things in day time. To take "tonics and stimulants" under such circumstances is like setting the house on fire to see if you can put it out.

You can put it out.

The right kind of food promotes refreshing sleep at night and a wide awake individual during the day.

A lady changed from her old way of eating, to Grape-Nuts, and says:

Nuts, and says:

"For about three years I had been a great sufferer from indigestion. After trying several kinds of medicine, the doctor would ask me to drop off potatoes, then meat, and so on, but in a few days that craving, gnawing, feeling would start up, and I would vomit everything I ate and drank.

"When I started on Grape-Nuts, vomiting stopped, and the bloating feeling which was so distressing disappeared entirely.

"My mother was very much bothered with diarrhea before commencing the Grape Nuts, because her stomach was so weak she could not digest her food. Since using Grape-Nuts she is well, and says she don't think she could live without it.

"It is a great brain restorer and nerve builder, for I can "It is a great brain restorer and nerve builder, for I can sleep as sound and undisturbed after a supper of Grape-Nuts as in the old days when I could not realize what they meant by a "bad stomach." There is no medicine so beneficial to nerves and brain as a good night's sleep, such as you can enjoy after eating Grape-Nuts."

Name given by Postum Co., Battle Creek, Mich.

"There's a reason."

The Educational Outlook

The State Superintendent of Schools of Kansas reports that there are 329 schools, most of them in the western parts of the state, unsupplied with teachers. The available supply of teachers in excess of those already engaged in the profession is 172, none of whom will accept positions in the counties where these are lacking.

The university summer schools of Texas have closed the most successful session since they were first established in 1898. Five hundred and seventy teachers were registered as opposed to two backers and seventy trees. hundred and sixty-two four years ago.

State Supt. J. D. Eggleston, of Virginia, says that during the coming year there will be more than 163, and possibly as many as 175 high schools in operation in his state. The recent legislature appropriated \$50,000 to be distributed arrents these high schools. among these high schools.

It is announced that co-education in the high school at Harrisburg, Pa., has been a failure. Separate schools for boys and girls will be provided as soon

To improve the sanitary condition of the Chicago public school buildings, about \$100,000 is being spent this sum-mer. A great change in the betterment of the health of pupils is predicted. Forty-four of the old school buildings are being overhauled, and the best sanitary apparatus obtainable is being installed therein.

More than 60,000 bouquets of flowers were distributed in one day by the Pitts-burg summer schools committee. The flowers sent out this season have given so much pleasure to the children that the weekly distribution of bouquets will be kept up.

The city of Boston has passed several The city of Boston has passed several new regulations with regard to the infliction of corporal punishment. Girls may not be whipped, nor may boys in the Latin or high school or kindergarten receive corporal punishment. No pupil may be punished in sight of another, and corporal punishment is restricted to blows upon the hand with a rattan.

The Boston school committee has offi-cially declared that the marriage of a woman teacher shall be equivalent to her resignation.

The movement of starting schools in Korea has become almost a mania. They are springing up on all sides and there is hardly a Korean of wealth who has not become a patron of an educational establishment of some kind. All enlightened Koreans have come to appreciate the fact that until at least primary education is general thruout their country they cannot hope to emerge from their present oppressed condition.

The English school teachers who will visit this country during the coming fall and winter thru provision of Alfred Moseley number some five hundred. They will come in squads of thirty each, about a week apart, and will include every grade of instructor from university sor down to kindergarten teacher.

We have given antikamnia tablets a fair trial and can certify to their wonderful power in the relief of pain. An agreeable remedy that acts without disturbing the stomach or heart, and on account of the accuracy of dosage, best given in the form of tablets. Two are the ordinary adult dose. Druggists generally dispense them.—Massachusetts Medical Journal.

business law, a broad outlook over the commercial and financial world, and the ability to reason quickly and accurately ebetted ability to reason quickly and accurately ebetted to reason quickly and accurately ebetted ability to reason qui

"Not imitation but initiative" is the motto of the Pierce School at Philastores also have signified their intention delphia. Following out this thought, the theory is advanced that while the successful man acts according to rules, he adapts his rules to the problems that come to him for settlement. The school corresponding to the first fortise fort opens for its forty-second year on Sep-

The enrollment at the normal college of Michigan, at Ypsilanti, for the summer session, has reached 1,415. It has been a studious summer with plenty of good, solid work, and every one has voted the ession a great success.

Manual training is soon to be established in the grade schools of Omaha, Nebraska. It has already been started in two schools, and the results have been such as to render the members of the beard of the started in the school of board of education enthusiastic over the

Mr. James J. Riggs has been elected superintendent of schools of Orange, N. J., to fill the place made vacant by the resignation of Superintendent W. H.

School districts in the neighborhood of Rochester, N. Y., will be compelled to pay teachers higher wages this year than heretofore. The scarcity of teachers in the scarcity of teachers in the scarcity of teachers. ers will, in many cases, prevent trustees from securing those whose training has fitted them for the work. The shortage in the supply, it is claimed, is due to the fact that the requirements for securing a certificate are more stringent than formerly, and because the salaries paid are not commensurate with the expense for completing the course necessary to meet the requirements.

To Teach Children to Save.

A merchant in Watertown, New York, who has been in business in that city for fifteen years, has celebrated his half century anniversary by an original plan for aiding boys and girls in forming the habit of conjunctions were westernatically for aiding boys and girls in forming the habit of saving money systematically. On August 15, \$1.00 was given to every boy and girl living in the city of Watertown between the ages of four and sixteen, until the sum of \$2,000 had been used up, under the following conditions: "Each child personally or thru his guardian had to apply to the secretary of the Watertown Savings Loan and Building Association for a book, to be issued to such child on condition that he deposit ten cents a week for a year.

he deposit ten cents a week for a year. with the Association.

At the end of the year \$1.00 extra is At the end of the year \$1.00 extra is to be added to the account, which, after that time, can be withdrawn by the owner. It is expected that the habit thus formed will be continued, as the child will have learned the value of saving.

"The course is established for the bene-"The course is established for the benefit of able, ambitious young business men who are looking forward to managerial positions. As business is to-day conducted, the men in charge must possess qualities which are not cultivated by routine work in subordinate positions. They must have a wide knowledge of general business methods and principles, a fair understanding of accounting and of business law, a broad outlook over the business law, a broad outlook over the commercial and financial world, and the

In his address before the American Institute of Instruction, at the recent meeting in New Haven, Hon. Charles D. Hine, Secretary of the State Board of Education, gave the following as the reasons why schools are poor:

1. The teachers are incompetent or indifferent, making no effort to improve themselves by summer schools or special instruction.

instruction.

2. The managers or school officers are only moderately and calmly desirous that either teachers or teaching shall be really good.

3. The funds are not adequate.
4. The schools are too small or too

large to be efficient.

5. There are many schools and few children in a large area

Finishing Their Education.

Finishing Their Education.

The mayor of Kalamazoo is a rich man. He has two sons who have been graduated from college. Has he tried to place them at once in responsible positions in the big industrial establishment he controls—giving them places which are usually attained only by years of hard work? Or does he supply them with unlimited spending money that they may lead the joyous life denied to him when he was a young man? Neither.

He put his sons at work in a paving gang on the streets of Kalamazoo. He is doing them a service which they will be increasingly thankful for as they advance in years. They are being taught, now, the real value of money and labor. They are learning, as they could not in any other way, how the great mass of the people live. Whatever their future positions may be, they will always know what life really means. They will feel the dignity of labor.

It would be better for the country if more rich fathers were like the mayor of Kalamazoo. The old-fashioned belief

more rich fathers were like the mayor of Kalamazoo. The old-fashioned belief that every boy should learn a trade, no matter what his chosen avocation may be, has gone out of style. In these days it would be difficult to carry out that plan, but the principle involved is still sound. The man who considers that its degrading to work with his hands is is degrading to work with his hands is not a good American.—New Haven, Conn. Palladjum.

The Pittsburg Technical Schools

The faculties of the Pittsburg technical schools are overwhelmed with applicaschools are overwhelmed with applica-tions for entrance at the beginning of the fall term, which opens the third week in September. Altho none of the addi-tional buildings have yet been erected, provision has been made for the accommodation of 1,100 students.
In the meantime, Director Hamer-

Hood's

Sarsaparilla is unquestionably the greatest blood and liver medicine known. It. positively and permanently cures every humor, from Pimples to Scrofula. It is the Best

Blood Medicine.

schlag and his staff of assistants are making splendid exertions to prepare for the enlargment of the school to such a degree that it may soon realize its founder's ambition, to see, it the greatest institution of technical learning in the world. The buildings yet to be erected will increase the present capacity of the school ten-fold. The money for this expansion is all on hand, and Mr. Carnegie is eager to give more. All that is needed is a little time, and we shall undoubtedly have in Pittsburg a technical school with 10,000 students and the greatest body of thoro technical instructors ever assembled.

University Technical Schools.

The trustees of Washington and Lee University have created two new schools in connection with the institution—one of "Highway Engineering" and the other of "Commerce." The purpose of the former is to meet the demand for engineers especially qualified for the work of the school to such a darking people to put in them per, and asking people to put in them make them worth a dozen ordinary not only the waste paper, but banana and such things as had been making: the streets ansty. These and rorange skins and such things as had been making: the street any trained and properly developed man badies went to all the schools and talked or woman is worth to his or her community 50 times as much as the ignorant and undeveloped person.

"The buse and progressive men and women who direct the policy of our higher institutions of learning are rapided.

"The wise and progressive men and women who direct the policy of our agazine and threw it away. You aman and undeveloped person.

"The was and progressive men and women who direct the policy of our ducational work, and are already providing tripartite education. That in the proper is the street."

"I was ashamed, and I picked up the paper, but have a way were willing.

"All immediately the feet way

The trustees of Washington and Lee University have created two new schools in connection with the institution—one of "Highway Engineering" and the other of "Commerce." The purpose of the former is to meet the demand for engineers especially qualified for the work of public road building and improvement. The school of commerce, which has recently sent out its prospectus, is designed to prepare students for sound citizenship, and has the following additional aims: tional aims:

tional aims:

First, instruction "so arranged and coördinated as to form a good preparation for young men who do not propose to engage in scientific or professional pursuits, but who wish to acquire a suitable preparation for business." Second, the encouragement of young men to prepare themselves for the study of law, such preparation being directed to fitting them "for dealing with business questions and practices, the knowledge of which is advantageous for the lawyer."

Among the studies embraced in the

then, is to get them to do two things. First, to clean up and keep clean about home and school; pick up papers and boxes on the street; take care of green, growing trees and plants, and have some flowers of your own, if possible. Second, to talk about it to each other and to your parents and home people trying to get parents and home people, trying to get them to help. Do this, and you will be helping much toward a beautiful America for children and all the rest."

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present generation, than you can turn the brightness of noonday into the black-ness of midnight."

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In a very notable address in London recently, Mr. Bryan, with a spirit truly American, put special emphasis upon the point of "education" in estimating the "white man's burden." Upon respect for industry as an essential in developing and sustaining the power of a race he was likewise emphatic. Mr. Bryan spoke of these two things as matters closely allied—as directly akin one ters closely allied—as directly akin one to the other.

to the other.

Now we are afraid that there is a flaw somewhere in Mr. Bryan's observation, because it is a fact beyond question that education, as we are pursuing it in this country upon a wholesale plan, does not lead up to and promote respect and consideration for industry. We speak not of the theory, for the theory is fair enough, but of the fact, which puts the theory to shame. theory to shame.

How long, let us ask, has it been since any youth graduated from the Sacra-mento High School fired and dignified with mento High School fired and dignified with an ambition for industry as distinct from some "genteel" method of getting a living? When has any of the many schools which we support so lavishly in California developed one student with a worthy enthusiasm for the ideals of the industrial career? We have "education" without end, but have we any system of education anywhere which produces a trained and enthusiastic practical worker in any one of the many fields of our industrial need?

California lies on the seaboard, and our hopes for the future are related largely to the development of commerce. Is there any school in California which

tion of supporting herself and helping her family. Before the end of the first year a taste for agriculture is systematically she was doing so, with twenty pupils and the fabulous income of \$10 every four weeks.—Everybody's Magazine.

Education and Industry.

In a very notable address in London recently. Mr. Bryan, with a spirit educates the working miner as distinctions at the soft agriculture are taught and where a taught and the particulture are taught and where a taught and where a taught and the particulture are taught and where a taught and taught and where a taught and taught and where a taught and where a taught and taught and taught and taught and taught and ta ducates the working miner as distinguished from the mining engineer? California needs manufactures, but where is there a school which develops the working mechanic? We have, to be sure, two or three endowed establishments nominally devoted to these matters but in each devoted to these matters, but in each instance they have been diverted from their original purpose, and have degenerated—we say degenerated—into mere commonplace establishments dominated by the academic idea, and yielding an annual product of professional and mercantile aspirants. The Sacramento shops have turned out more finished mechanics have turned out more finished mechanics ten times over than all the so-called industrial schools of California put together.

Education is truly the handmaiden of progress, but education in the proper sense should be something very different sense should be something very different from that smattering of academics which engrosses the energies of our educational system, and which in practice leads steadily away from the aims, the ambitions, and the high utilities of industry. Education in any country ought to prepare the youth of that country for the work which needs to be done in that country. Education, to be worthy of the name, ought to prepare the mass of its beneficiaries for the life duties that lie before them. A system of education which endows every youth who comes within its influence with a passion for clean hands and a life of ease is not a help but a curse to the country in which California lies on the seaboard, and our hopes for the future are related help but a curse to the country in which largely to the development of commerce. It exists, and to those upon whom it Is there any school in California which bestows its presumptive "benefits." A turns out sailors? There may be some such school in some loft at the San Francisco city front taught by some practical as a future academic graduate, which man for a special fee, but there is no such school in connection with our system of public education. California is a great agricultural and horticultural field, "graduation," does not lead to respect and in this connection in large measure we fix our hopes for the future. Has does not assist a race in the bearing of California any school where the working its burdens.

The world has very recently seen what happens to a nation when it has lost regard for industry. It has seen Spain go to a shameful defeat because she could gard for industry. It has seen Spain go to a shameful defeat because she could not from her citizenship supply engineers and gunners to operate her warships bought from foreign shipyards. The world to-day sees England losing her power and her prestige thru the decline of her industrial classes; and by the same token the world to-day sees Germany expanding in her relationships to the world, growing in power and prestige, because she has half a thousand schools in which the arts and the ambitions of industry are systematically inculcated. Education is indeed the need of America, and of every other modern country, but if education is to signify anything as a source of progress and as a national and racial support, it must have a broader basis than anything we have recently seen in this country.—Sacramento, Cal. Union.

Recent Deaths.

Prof. Samuel Lewis Penfield, head of the department of mineralogy in the Sheffield Scientific School, connected with Yale University, died August 14 at his summer home in South Woodstock, Conn. He had been ill for some two years. Professor Penfield was one of the most distinguished mineralogists in the country. He was a member of the National Academy of Science and of several scientific societies abroad.

The Rev. Thomas Nelson Haskell, of Denver, Colo., died at his home, on the evening of August 10, after a brief illness. Mr. Haskell was the founder of Colorado College, located in Colorado Springs. The institution was started as a memorial to his daughter, Florence Edwards Haskell, who died in 1873.

Mr. Haskell was born in 1826 in New York State. He was graduated from Miami College and the New York Theological Seminary. For several years he was pastor of churches in Boston, and later in Washington, where he established the Western Presbyterian Church. President Lincoln often attended this church. Mr. Haskell was a poet and well known writer.

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